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## **Intelligent transport systems — DATEX II data exchange specifications for traffic management and information — Part 6: Parking publications**

*Intelligente Verkehrssysteme — DATEX II Datenaustauschspezifikation für Verkehrsmanagement und Verkehrsinformation — Teil 6: Publikation von Parkrauminformationen*

*Systèmes de transport intelligents — Spécifications DATEX II d'échange de données pour la gestion du trafic et l'information routière — Partie 6 : Publication de parking*

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## Foreword

This document (prCEN/TS 16157-6:2014) has been prepared by Technical Committee CEN/TC 278 “Intelligent Transport Systems”, the secretariat of which is held by NEN.

This document is currently submitted to the CEN Enquiry.

CEN/TS 16157 consists of the following parts, under the general title “Intelligent transport systems — DATEX II data exchange specifications for traffic management and information”:

- Part 1: Context and framework
- Part 2: Location referencing
- Part 3: Situation publication

The following parts are under preparation:

- Part 4: Variable message Sign publication
- Part 5: Measured & elaborated data publication
- Part 6: Parking publications
- Part 7: Traffic view publication

As a user of this Technical Specification, attention is drawn to the resources of [www.datex2.eu](http://www.datex2.eu). This web site contains related software tools and software resources that aid the implementation of CEN/TS 16157 DATEX II.

Other parts may be developed in the future.

## Introduction

This Technical Specification defines a common set of data exchange specifications to support the vision of a seamless interoperable exchange of traffic and travel information across boundaries, including national, urban, interurban, road administrations, infrastructure providers and service providers. Standardisation in this context is a vital constituent to ensure that interoperability, reduction of risk, reduction of the cost base and promotion of open marketplace objectives are achieved that will lead to many social, economic and community benefits as a result of more informed travellers, network managers and transport operators.

Delivering European Transport Policy in line with the White Paper issued by the European Commission requires co-ordination of traffic management and the development of seamless pan European services. With the aim to support sustainable mobility in Europe, the European Commission has been supporting the development of information exchange mainly between the actors of the road traffic management domain for a number of years. In the road sector, DATEX II has been long in fruition, with the European Commission being fundamental to its development through an initial contract and subsequent co-funding through the Euro-Regional projects. With this standardisation of DATEX II there is a real basis for common exchange between the actors of the traffic and travel information sector.

This Technical Specification includes the framework and context for exchanges, the modelling approach, data content, data structure and relationships and communications specification. Part one of this Technical Specification defines a methodology which is extensible.

The sixth part of the CEN 16157 series (this Technical Specification) deals with the publication of parking information. It specifies the structures and definitions of information that may be exchanged to convey urban parking information or Truck Parking information.

A DATEX II profile for Truck Parking is specified in the normative Annex A, which is in accordance with [1] (further here within called "EU Truck Parking regulation"). The DATEX II profile for Truck Parking provided in this Technical Specification can be used to collect and provide the data required in Article 4 of the EU Truck Parking regulation. The informative Annex B shows how to do this.

Informative Annex C gives additional explanation to the Truck Parking profile for DATEX II, informative Annexes D and E present a comprehensive and a lean version of an urban parking profile.

Informative Annex F gives an overview about the Parking Publications model and its profiles.

In normative Annex G, the data dictionary for the Parking Publications is specified.

XML-Schemes to the Parking Publications model and the DATEX II Truck parking profile are provided in these annexes:

- normative Annex H: Referenced XML schema for Parking Publications model
- normative Annex I: Referenced XML schema for the Truck Parking profile

XML encoding examples can be found in informative Annex J.

The European Committee for Standardisation (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning procedures, methods and/or formats given in this document.

CEN takes no position concerning the evidence, validity and scope of patent rights.

## 1 Scope

CEN/TS 16157 specifies and defines component facets supporting the exchange and shared use of data and information in the field of traffic and travel. The component facets include the framework and context for exchanges, the modelling approach, the data content, the data structure and relationships and the communications specification.



Part 6 of this Technical Specification is applicable to:

- Parking information – static and dynamic information about urban or interurban parking sites including Truck Parking information

It establishes specifications for data exchange between any two instances of the following actors:

- Traffic Information Centres (TICs),
- Traffic Control Centres (TCCs),
- Service Providers (SPs),
- Parking Operators.

Use of this Technical Specification may be applicable for use by other actors.

This Part of the Technical Specification includes the following type of information content:

- Parking information including static content (description and attribution of parking areas, parking sites and single parking spaces) and dynamic content (occupancy and vehicle measurement information). It covers urban parking information as well as Truck Parking information. It also covers a publication for information about specific parking vehicles.

Thus, this Part of CEN/TS 16157 specifies the informational structures, relationships, roles, attributes and associated data types required for publishing parking information within the DATEX II framework. This is specified as a DATEX II Parking Publications sub-model, which is part of the DATEX II platform independent model, but this Part excludes those elements that relate to location information which are specified in CEN/TS 16157-2.

## 2 Conformance

The Parking Publications model is a Level-B extension of the DATEX II platform independent data model defined in CEN/TS 16157-1.

Conformance with Part 1 shall require platform independent models from which platform specific models are generated to comply with the UML modelling rules defined in CEN/TS 16157-1 and with the following requirements of this sub-model that are expressed in this Part:

- comply with all stipulated minimum and maximum multiplicity requirements for UML elements and relationships
- comply with all definitions, types and ordering
- employ optional elements as specified
- comply with all expressed constraints.

It should be noted that conformance of a publication service with all the structural requirements stated above does not necessarily ensure that the informational content of that service will be semantically comprehensible.

## 3 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 16157-1, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 1: Context and framework*

CEN/TS 16157-2, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 2: Location referencing*

CEN/TS 16157-3, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 3: Situation Publication*

ISO/IEC 19501:2005-04 – Information technology - Open Distributed Processing - Unified Modeling Language (UML) Version 1.4.2

ISO 639-2: 1998 – *Codes for the Representation of Names of Languages – Part 2: alpha-3 codes*

## **4 Terms and definitions**

For the purposes of this document, the terms and definitions given in CEN/TS 16157-1 and in the following list shall apply.

**4.1 dynamic part [of the parking publications model]**  
the Parking Status Publication model. Can also express the Parking Status Publication part of one of the profiles specified in this document

**4.2 eu truck parking regulation**  
short form for the “COMMISSION DELEGATED REGULATION (EU) No 885/2013 of 15 May 2013 supplementing ITS Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles” [1]

**4.3 group of parking spaces**  
combines and encompasses a number of parking spaces that can be logically reported together

**4.4 group of parking sites**  
combines and encompasses a number of parking sites that can be logically reported together

**4.5 label**  
a project on truck parking service and security classification, see [2] and [3]

**4.6 lean urban profile**  
a lean DATEX II profile on urban parking information as specified in informative Annex E

**4.7 level b extension**  
a method to extend the DATEX II Level A data model with new elements, ensuring backwards compatibility

**4.8 parking publications model**  
entirety of the Parking Table Publication model, the Parking Status Publication model and the Parking Vehicles Publication model

**4.9****parking record**

a parking site or a group of parking sites. It is a logical construct with dedicated properties

**4.10****parking site**

a building, structure or identifiable (geographically bounded) space that is used for parking

**4.11****parking space**

a single space for parking, usually designed for one vehicle

**4.12****profile**

a DATEX II profile, i.e. a DATEX II compliant sub model of the DATEX II Level A model, possibly including extensions. Here in this document, a profile is always a DATEX II compliant sub model of the Parking Publications model

**4.13****static part [of the parking publications model]**

the Parking Table Publication model. Can also express the Parking Table Publication part of one of the profiles specified in this document

**4.14****truck parking profile**

the DATEX II profile for Truck Parking specified in normative Annex A

**4.15****truck parking site**

an urban or interurban parking site which is assigned to Truck Parking (but other vehicles might be allowed as well)

**4.16****urban parking profile**

a comprehensive DATEX II profile on urban parking information as specified in informative Annex D

## 5 Symbols and abbreviations

ETRS89	European Terrestrial Reference System 1989
EU	European Union
GUID	Globally Unique Identifier
HTML	Hyper text mark-up language
IP	Internet Protocol
ITS	Intelligent Transport Systems
ITP	Intelligent Truck Parking
LPG	Liquid Petroleum Gas
PDF	Portable document format created by Adobe

UML	Unified Modeling Language
URL	Uniform Resource Locator
VMS	Variable Message Sign

## **6 UML notation**

The UML notation used in these Technical Specifications shall be as described in ISO/IEC 19501. A short summary explaining the notation used in this Technical Specification is provided in Annex A of Part 1 of CEN/TS 16157.

## **7 Integration of the Parking Publications model within DATEX II**

### **7.1 Overview**

The DATEX II top-level package “D2LogicalModel” defined in CEN/TS 16157-1 shall have a sub-package named “Extension”.

The package “Extension” shall have a sub-package named “Approved”.

The package “Approved” shall have a sub-package named “ParkingPublications”.

The Parking Publications model shall comprise the following packages, with the “ParkingPublications” package on top:

- ParkingTablePublication (see Clause 7.2)
- ParkingStatusPublication (see Clause 9)
- ParkingVehiclesPublication (see Clause 10)

As the DATEX II Level B mechanism shall be used for the integration of the Parking Publications model into the existing DATEX II Level A model, the following components shall have a tagged value “extension” - “levelb” and are therefore the entry points to Level B extensions:

- ParkingTablePublication
- ParkingStatusPublication
- ParkingVehiclesPublication
- PointExtended
- PeriodExtended
- AreaExtended
- VehicleCharacteristicsExtended

The data dictionary presented in normative Annex G specifies all of the elements of the Parking Publications model.

## 7.2 The “GenericPublication” package

### 7.2.1 Overview of the “GenericPublication” package

The “GenericPublication” package (see Figure 1) shall be a sub-package of the “PayloadPublication” package defined in CEN/TS 16157-1.

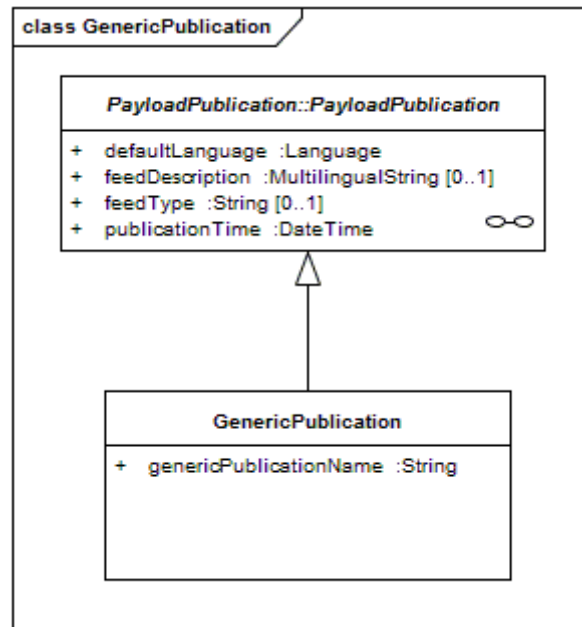


Figure 1 — The “GenericPublication” package class model

### 7.2.2 Semantics of the “GenericPublication” package

#### 7.2.2.1 “GenericPublication” package semantics – general

The “GenericPublication” package shall comprise a publication used to make level B extensions at the publication level.

#### 7.2.2.2 “GenericPublication” Class

The “GenericPublication” class is a specific realisable case of a “PayloadPublication” and used to make level B extensions at the publication level. Its attribute “genericPublicationName” is used to specify a name for any level B extended publication.

## 8 The Parking Table Publication model

### 8.1 Overview of the Parking Table Publication model

The Parking Table Publication model comprises a number of packages, with the “ParkingTablePublication” package providing the entry point to the static part of the Parking Publications model, which utilise some classes from the “GroupOfLocations” package and the “ReusableClasses” package defined in CEN/TS 16157-2 and CEN/TS 16157-3.

Each “ParkingTablePublication” instance shall contain one or more instances of a “ParkingTable”.

Each “ParkingTable” instance shall contain one or more “ParkingRecord”, which shall be an abstract class containing basic properties for a parking site or a group of parking sites such as location information, information on equipment and service facilities, assignments, tariffs, parking spaces and group of parking spaces, thresholds, permits and prohibitions, contact details for different roles, VMS, parking routes or a colour.

A “ParkingRecord” shall be further specialised as being either of type “GroupOfParkingSites” or “ParkingSite”. A group of parking sites (being an instance of “GroupOfParkingSites”) may contain zero, one or more “ParkingSite”, which shall be an abstract class.

A “ParkingSite” shall be further specialised as being either of type “InterUrbanParkingSite”, “UrbanParkingSite” or “SpecialLocationParkingSite”.

The corresponding schema for the Parking Table Publication model can be found in normative Annex H of this document.

## **8.2 The “ParkingTablePublication” package**

### **8.2.1 Overview of the “ParkingTablePublication” package**

The “ParkingTablePublication” package (see Figure 2) shall comprise a sub-model for defining one or more publishable “ParkingTable” which comprise records defining one or more “GroupOfParkingSites” or “ParkingSite” or both.

Each publication shall contain one or more “ParkingTable”, allowing logical partitioning of a group of parking sites and parking site (“ParkingSite”) information as deemed most appropriate for recipients of parking data information by the supplier (e.g. by road designation or other geographic criteria or by type of the parking site, etc.).

The value of the “genericPublicationName” attribute shall be defined as “ParkingTablePublication”.

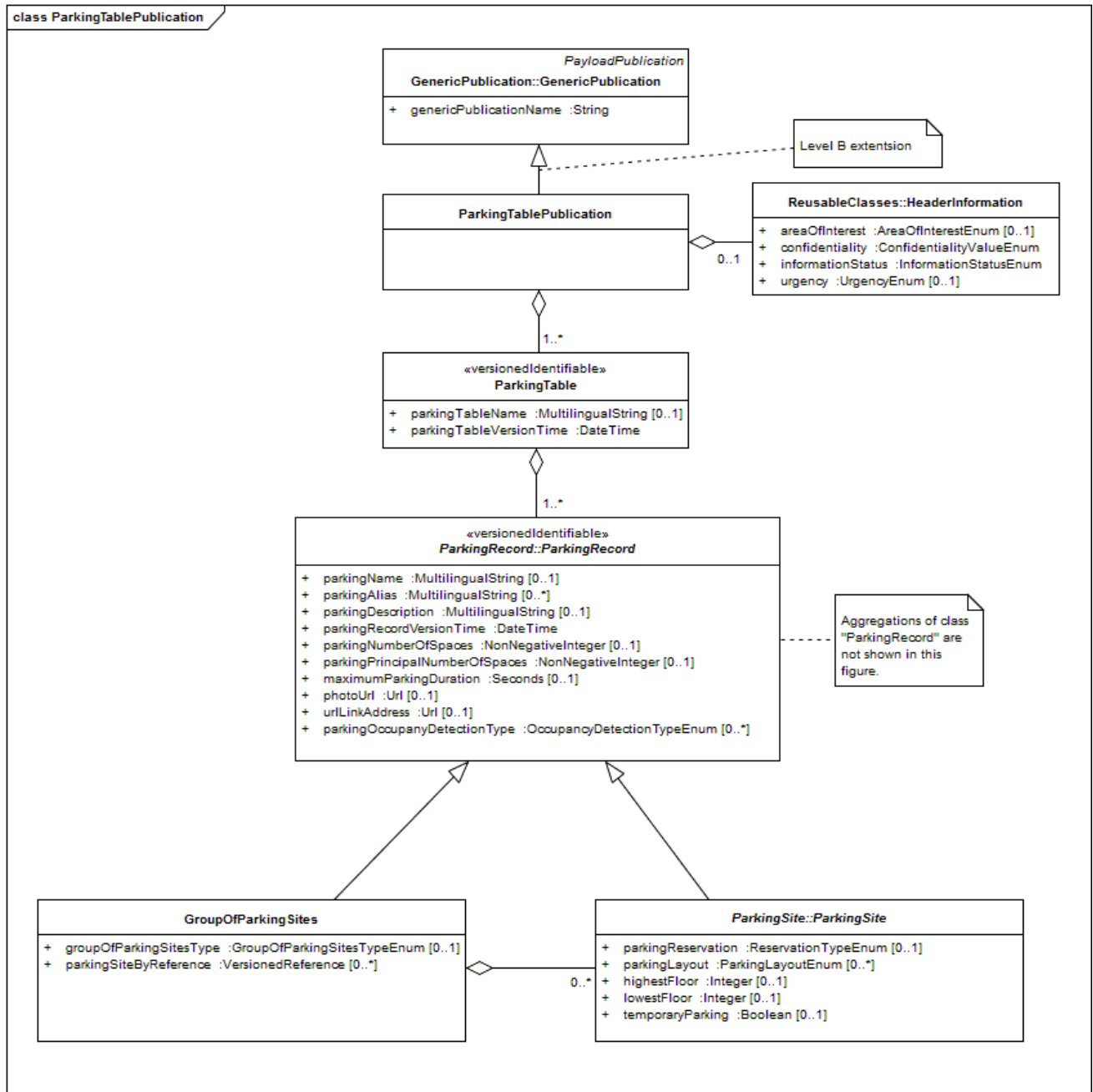


Figure 2 — The “ParkingTablePublication” package class model

## 8.2.2 Semantics of the “ParkingTablePublication” package

### 8.2.2.1 “ParkingTablePublication” package semantics – general

The “ParkingTablePublication” package shall support the definition of a hierarchy out of parking sites using a ParkingTable. Properties for these elements are specified in the following packages below.

### 8.2.2.2 “ParkingTablePublication” Class

The “ParkingTablePublication” class is a specific realisable case of a “GenericPublication” (see Clause 7.2). It shall be specified as a DTEX II “Level B extension”. Each “ParkingTablePublication” shall contain one or more separate “ParkingTable”.

The “ParkingTablePublication” class is the base class for containing the published “ParkingTable”.

Each instance of a “ParkingTablePublication” may have associated metadata contained in an instance of the “HeaderInformation” class, which allows the supplier of the “ParkingTablePublication” to specify how the recipient should treat the information contained in it. This class is defined in Part 3 of CEN/TS 16157.

### 8.2.2.3 “ParkingTable” Class

The “ParkingTable” class shall be of stereotype “versionedIdentifiable” to be referenced in the dynamic part of the model.

Each instance of a “ParkingTable” may contain one or more instances of the “ParkingRecord” class, which shall contain characteristics, and information both for a group of parking sites and parking sites. Details about the “ParkingRecord” class are found in Clause 8.3.

### 8.2.2.4 “GroupOfParkingSites” Class

An instance of the “GroupOfParkingSites” class shall be a specialisation of the “ParkingRecord” class. A group of parking sites is a logical composition of parking sites with common properties that can be aggregated (such as the number of parking spaces).

The type of the group of parking sites can be specified with the “groupOfParkingSitesType” attribute. Examples of a “GroupOfParkingSites” are an urban parking zonal area (for example called “city west”) or all truck parking sites along a specific motorway.

Each instance of the “GroupOfParkingSites” class may contain zero, one or more instances of the “ParkingSite” class, i.e. it is allowed (but not mandatory) to specify the enclosed parking sites of this group of parking sites. With the attribute “parkingSiteReference”, it is also possible to reference enclosed parking sites that have been specified earlier.

## 8.3 The “ParkingRecord” package

### 8.3.1 Overview of the “ParkingRecord” package

The “ParkingRecord” package (see Figure 3 up to Figure 6) shall support provision of common information on a group of parking sites and parking sites.

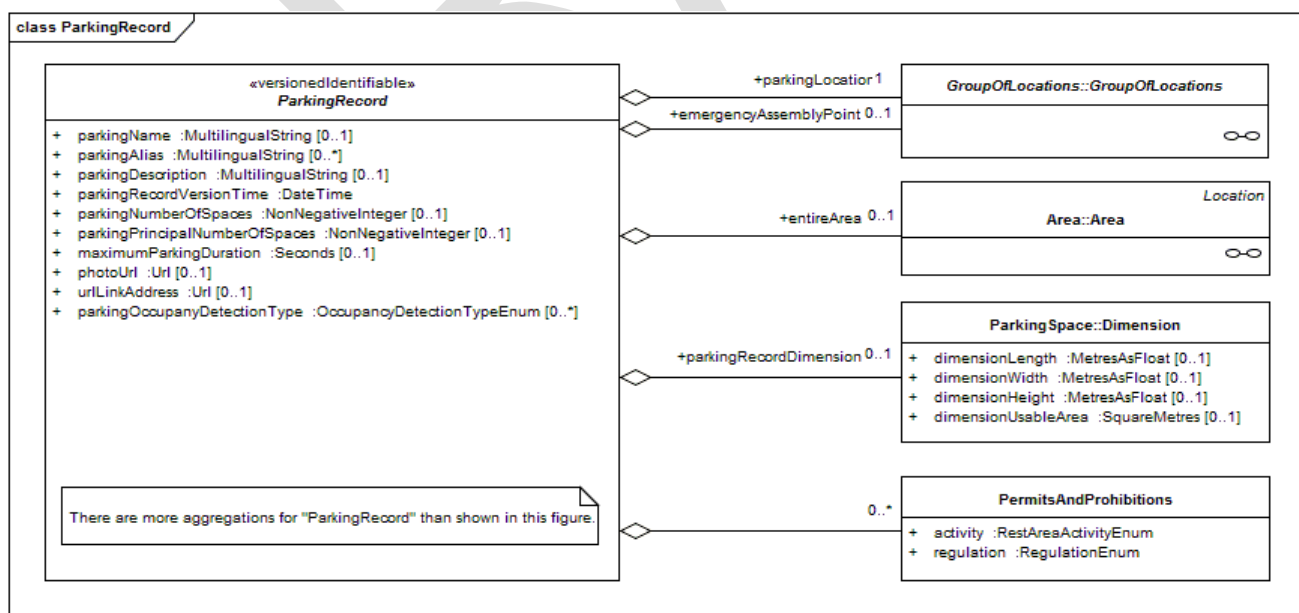


Figure 3 — The “ParkingRecord” package class model (I)



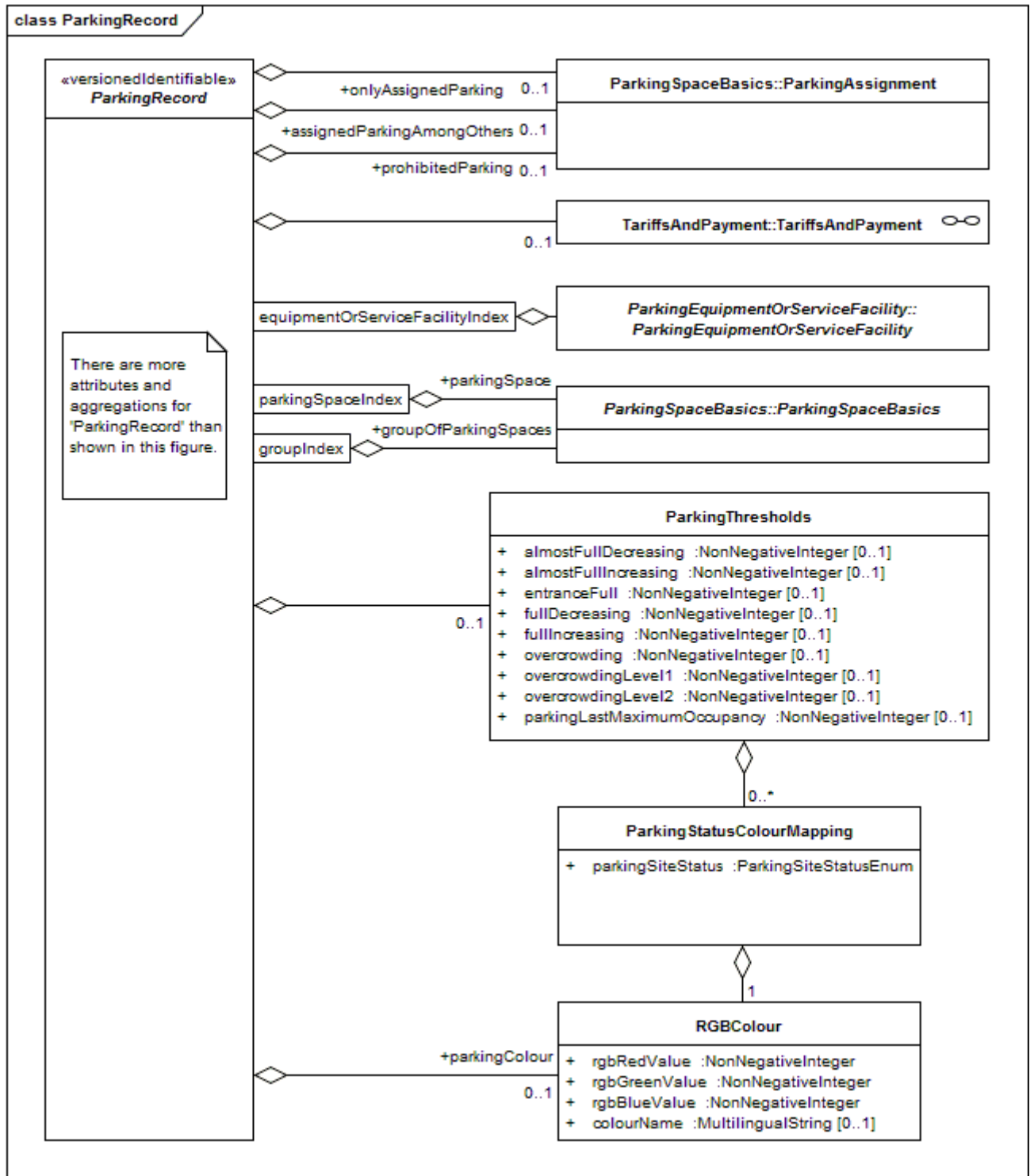


Figure 4 — The “ParkingRecord” package class model (II)

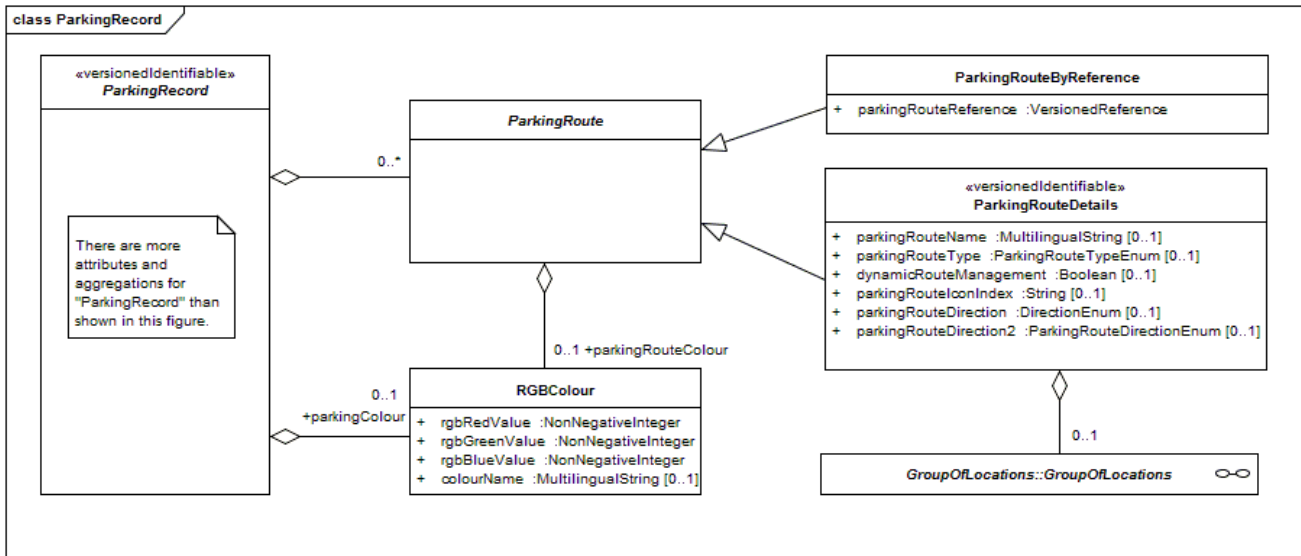


Figure 5 — The “ParkingRecord” package class model (III) – (focus Route)

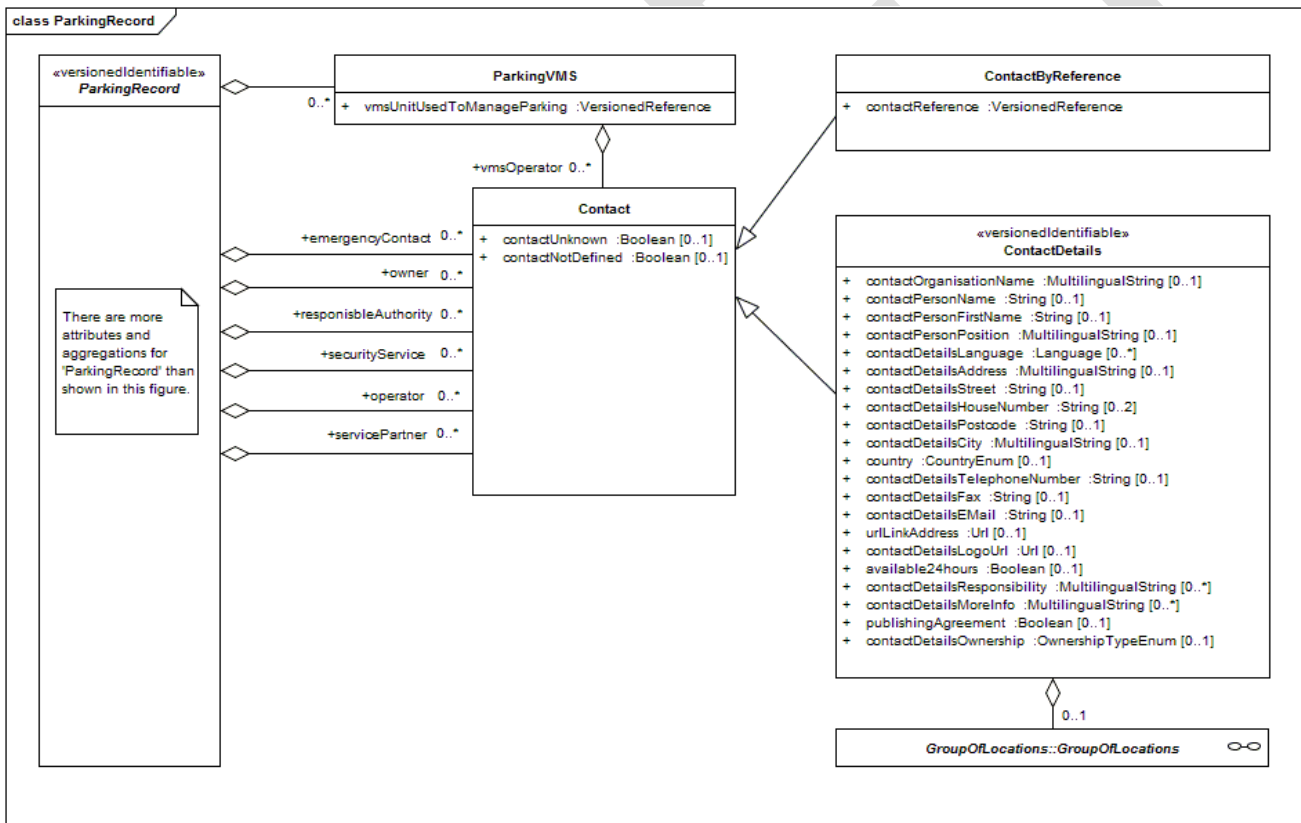


Figure 6 — The “ParkingRecord” package class model (IV) – (focus Contact)

### 8.3.2 Semantics of the “ParkingRecord” package

#### 8.3.2.1 “ParkingRecord” package semantics – general

The “ParkingRecord” package shall allow the specification of basic information for parking sites or group of parking sites, including (among others) information concerning:

- name, number of spaces, methods of detection, etc.
- thresholds for the applicability of enumeration values in the dynamic part of the Parking Publications model including the definition of a mapping for colours to different occupancy states
- defined sets of contact information (e.g. for owners, operators, responsible authorities, emergency services, etc.)
- sets of allowed and prohibited activities
- related parking guidance systems (variable message signs) and routes.

With classes from other packages (as defined below), the semantics of the “ParkingRecord” package may be enhanced by:

- a range of information about the physical characteristics of the parking site(s), accessibility or special assignments either for a single parking space or a group of parking spaces (see the “ParkingSpaceBasics” package, Clause 8.12)
- usage assignments for parking site(s) (i.e. prohibited for special users or vehicles, particularly suitable for special users or vehicles, definition of availability timeslots, ...) (see “ParkingSpaceBasics” package, Clause 8.12)
- information about tariffs (see “TariffsAndPayment” package, Clause 8.10.2)
- available equipment (e.g. toilets, showers etc.) or service facilities (e.g. restaurants, shops, ...). All this information can be provided in a more complex and detailed manner (see “ParkingEquipmentOrServiceFacility” package, Clause 8.8).
- the dimensions of the Parking site(s) (see class “Dimension” in Clause 8.11.2.4), including the available space for parking given in square metres.

### 8.3.2.2 “ParkingRecord” Class

The “ParkingRecord” class shall be abstract and shall be of stereotype “versionedIdentifiable”. It shall be specialised by using the “GroupOfParkingSites” class or the “ParkingSite” class.

The abstract “ParkingRecord” class may provide basic information for parking site(s) in the form of attributes, for instance, name and alias name, description, timestamp and capacity (number of places) may be specified.

A parking record may be assigned with a colour and associated with routes and parking guidance VMS.

Special usage assignments may be specified (for example for special users or vehicles, combined with accepted forms of validity). It is also possible to prohibit the usage for special assignments. Instances of the “ParkingAssignment” class may be created for the roles “onlyAssignedParking”, “assignedParkingAmong Others” or “prohibitedParking”.

Tariffs and payment for the parking record may be specified as well as available equipment (e.g. toilets, showers etc.) or available service facilities (e.g. restaurants, shops etc.). All this information can be provided in a more complex and detailed manner. Instances of “ParkingEquipmentOrServiceFacility” shall be indexed to be referenced in the “ParkingEquipmentOrServiceFacilityStatus” class.

Complex information about single parking spaces as well as grouped parking spaces may be specified using the class “ParkingSpaceBasics” (with the specialisation “ParkingSpace” or “GroupOfParkingSpaces”). Instances of “ParkingSpaceBasics” shall be indexed to be referenced in the “ParkingSpaceStatus” or the “GroupOfParkingSpacesStatus” class.

### 8.3.2.3 “ParkingThresholds” Class

An instance of the “ParkingThresholds” class may provide configuration parameters of the parking record used (amongst others) for the dynamic attribute “parkingSiteStatus” (in the class “ParkingSiteStatus”) or for overcrowding levels:

- “almostFullDecreasing” indicates the number of available spaces above which the state of the parking site is considered to change from 'almost full' to 'spaces available' as the site's occupancy decreases. The value of the “almostFullDecreasing” threshold must be greater than or equal to 'almostFullIncreasing' threshold value.
- “almostFullIncreasing” indicates the number of available spaces below which the state of the parking site is considered to change from 'spaces available' to 'almost full' as the site's occupancy increases. The value of the “almostFullIncreasing” threshold must be lower than or equal to “almostFullDecreasing” threshold value and greater than the 'fullDecreasing' threshold value.
- “entranceFull” indicates the number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g. full sign is displayed at entrance or on related VMS).
- “fullDecreasing” indicates the number of available spaces above which the state of the parking site is considered to change from 'full' to 'almost full' as the site's occupancy decreases. The “fullDecreasing” threshold value must be greater than or equal to 'fullIncreasing' value and lower than 'almostFullIncreasing' value.
- “fullIncreasing” indicates the number of available spaces below which the state of the parking site is considered to change from 'almost full' to 'full' as the site's occupancy increases. The “fullIncreasing” threshold value must be lower than or equal to 'fullDecreasing' value.
- “overcrowding” indicates the number of vehicles on the parking above which the overcrowding state of the parking site is considered to change to “overcrowding”. Can be used as an alternative to the following overcrowding level attributes.
- “overcrowdingLevel1” indicates the number of vehicles on the parking site above which the overcrowding state of the parking site is considered to change from “notOvercrowded” to “overcrowdingLevel1”. The “overcrowdingLevel1” threshold must be lower than the “overcrowdingLevel2” value.
- “overcrowdingLevel2” indicates the number of vehicles on the parking site above which the overcrowding state of the parking site is considered to change from “overcrowdingLevel1” to “overcrowdingLevel2”. The “overcrowdingLevel2” threshold must be greater than the “overcrowdingLevel1” value.
- “parkingLastMaximumOccupancy” indicates the last known occupancy (number of parked vehicles on the site) under safe conditions.

This class with all of its attributes may be overridden in the dynamic part of the model to adjust support frequent adjustment of the threshold values.

A mapping of parking site states to different colours may be done with the aggregation to “ParkingStatusColour Mapping”.

For further explanation on the semantics of these attributes, see Clause C.2.2.

### 8.3.2.4 “ParkingStatusColourMapping” Class

Each instance of this class shall define a pair of a 'parkingSiteStatus' enumeration literal and a corresponding colour.

### 8.3.2.5 “RGBColour” Class

Each instance of the “RGBColour” class shall define a colour by values of red, green and blue, each given by an integer value between 0 and 255. In addition, a common name for that colour may be specified.

### 8.3.2.6 “PermitsAndProhibitions” Class

Each instance of the “PermitsAndProhibitions” class shall define a pair of activity and regulation to specify permits and prohibitions valid for the parking record. Examples include 'open fire prohibited' or 'smoking only outside buildings'.

### 8.3.2.7 “ParkingVMS” Class

Each instance of the “ParkingVMS” class shall define a versioned reference to an instance of the class “VmsUnitRecord” (defined in CEN-TS 16157-4) to identify VMS related to this parking record. A “vmsOperator” role may be defined with address and contact information as defined in the “ContactDetails” class.

### 8.3.2.8 “Contact” Class

Instances of the “ContactDetails” class may be created for the following roles targeting the “ParkingRecord” class:

- “emergencyContact”
- “owner”
- “responsibleAuthority”
- “securityService”
- “operator”
- “servicePartner”

as well as for the following roles targeting the “ParkingSite” class:

- “parkingSiteAddress”
- “reservationService”

as well as for the role “vmsOperator” targeting the “ParkingVMS” class.

The “Contact” class may be specialised either by using the “ContactByReference” class to reference previously defined contact information or by using the “ContactDetails” class to specify a new set of contact information.

For each instance of the “Contact” class, a validity period may be specified by using the “validityOfContact” role.

### 8.3.2.9 “ContactByReference” Class

An instance of this class shall reference a previously defined set of contact information.

### 8.3.2.10 “ContactDetails” Class

The “ContactDetails” class shall be of stereotype “versionedIdentifiable”.

An instance of the “ContactDetails” class shall describe detailed contact and address information for an organisation or facility (including contact person information, location information, information about the ownership model, the 24 hour-availability or the corresponding logo URL).

### 8.3.2.11 “ParkingRoute” Class

The “ParkingRoute” class shall be abstract and shall be specialised either by using the “ParkingRouteByReference” class to reference a previously defined parking route or by using the “ParkingRouteDetails” class to specify a new parking route.

A corresponding colour may be defined for a parking route using the aggregation “parkingRouteColour”.

#### **8.3.2.12 “ParkingRouteByReference” Class**

An instance of this class shall reference a previously defined parking route.

#### **8.3.2.13 “ParkingRouteDetails” Class**

The “ParkingRouteDetails” class shall be of stereotype “versionedIdentifiable”.

An instance of the “ParkingRoute” class shall identify a route on which motorists are guided to this parking record (for instance with help of VMS, see above). A name, a type, an index for an icon, a location (“GroupOfLocation” class; the usage of an “Itinerary” location is suggested for this purpose) as well as the direction may be specified for this route. The Boolean attribute “dynamicRouteManagement” shall indicate, whether the route is part of some dynamic Truck Parking route management.

## 8.4 The “ParkingSite” package

### 8.4.1 Overview of the “ParkingSite” package

The “ParkingSite” package (see Figure 7 and Figure 8) shall comprise a sub-model for specifying details for a parking site.

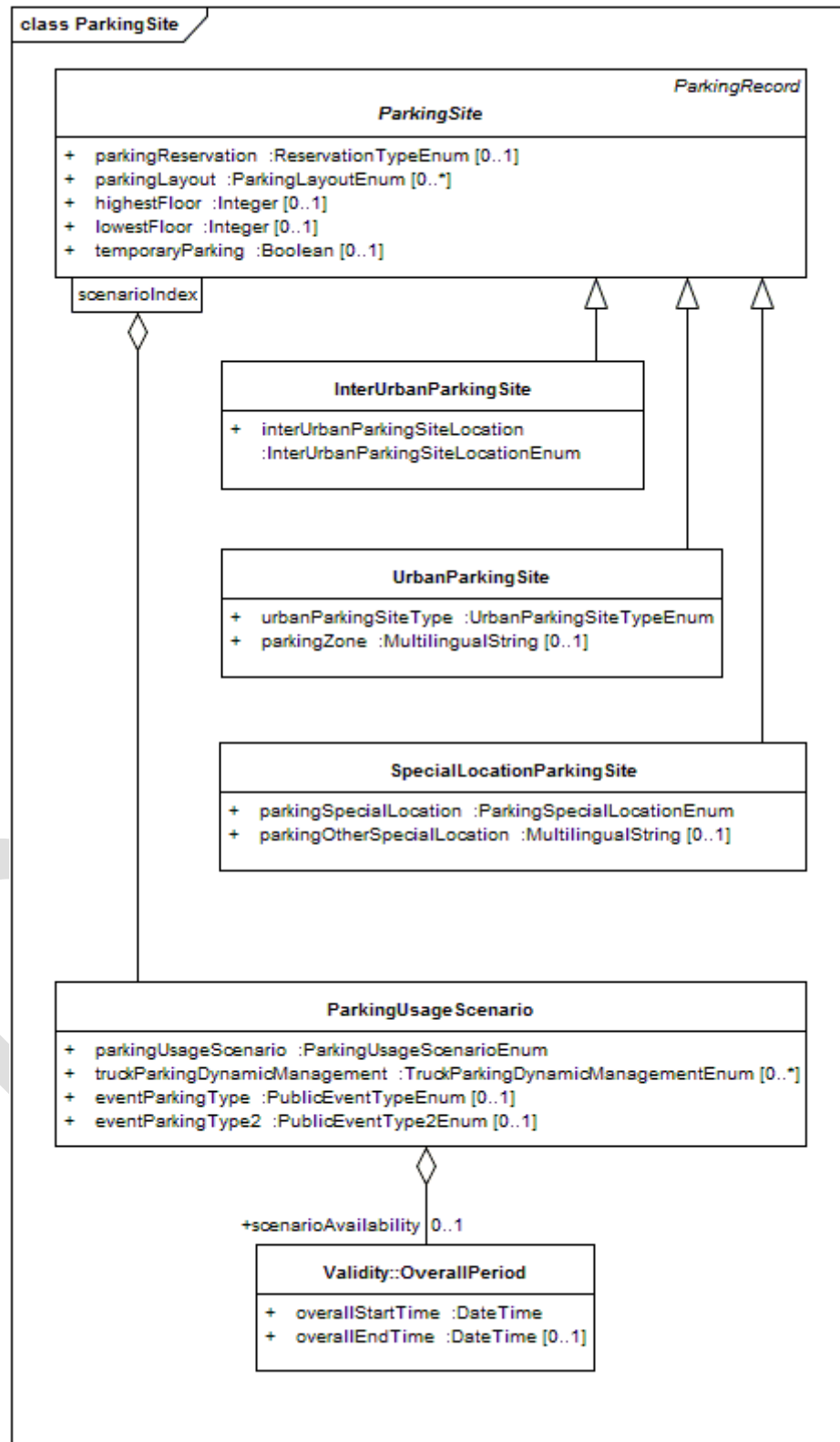


Figure 7 — The “ParkingSite” package class model (I)

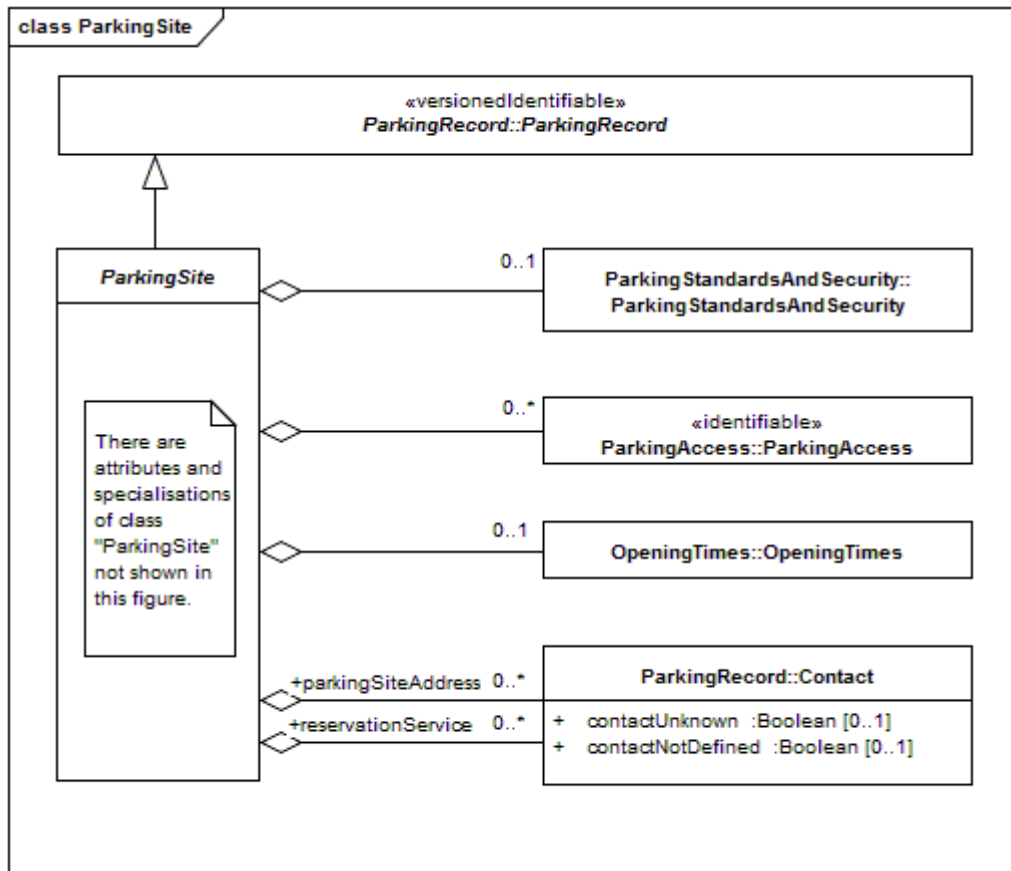


Figure 8 — The “ParkingSite” package class model (II)

## 8.4.2 Semantics of the “ParkingSite” package

### 8.4.2.1 “ParkingSite” package semantics – general

A parking site is a building, structure or identifiable (geographically bounded) space that is used for parking. In addition to the “ParkingRecord” class, of which the “ParkingSite” class shall be a specialisation, further characteristics can be specified. These are, for example, layout, standards and security measures (using the “ParkingStandardsAndSecurity” class defined in Clause 8.15), the address (using the “Contact” class defined in Clause 8.3.2.8), entrances and exits (using the “ParkingAccess” class defined in Clause 8.7) or opening times (using the “OpeningTimes” class defined in Clause 8.6).

### 8.4.2.2 “ParkingSite” Class

The “ParkingSite” class shall be abstract. It shall be specialised by using the “InterUrbanParkingSite” class, the “UrbanParkingSite” class or the “SpecialLocationParkingSite” class.

The “ParkingSite” class shall contain the characteristics information relating to one of the specialised types of parking site beyond the information given with the “ParkingRecord” generalisation.

Some characteristics for a parking site include:

- The address of the parking site may be specified using the “Contact” class defined in Clause 8.4.2.8



- “parkingReservation” may specify the possibility of making reservations for parking usage; in addition, “reservationService” may specify contact information for the reservation service using the “Contact” class defined in Clause 8.3.2.8.
- Opening times for the parking site may be specified using the “OpeningTimes” class defined in Clause 8.6.
- Standards and security measures of the parking site such as the LABEL security and service level [2], [3], fences or CCTV may be specified using the “ParkingStandardsAndSecurity” class defined in Clause 8.15.
- Entrances and exits of the parking site (with additional information like name, location, special assignments and characteristics) may be specified using the “ParkingAccess” class defined in Clause 8.7.
- The layout of the parking site (e.g. multi-storey, open space, etc.) may be specified with the attribute “parkingLayout”; in addition, the highest and lowest floor can be specified, if applicable.

NOTE Modeling a Truck Parking site is not limited to the use of the “InterUrbanParkingSite” specialisation, as there exist urban truck parkings, too, for example. Rather, a Truck Parking site shall be determined by the use of the “ParkingUsageScenario” class with “parkingUsageScenario” = “truckParking”.

#### 8.4.2.3 “InterUrbanParkingSite” Class

An instance of the “InterUrbanParkingSite” class shall be used when specifying a parking site, which is located in an interurban environment. Its location can be specified as being directly adjacent or nearby a motorway, being a layby or interurban on street parking.

#### 8.4.2.4 “UrbanParkingSite” Class

An instance of the “UrbanParkingSite” class with mandatory “urbanParkingSiteType” specifies an urban on-street parking site (at the side of the road) or an urban off-street parking site (any other type of urban car park or parking site).

A parking zone within a defined parking site may be specified in textual form with attribute “parkingZone”.

#### 8.4.2.5 “SpecialLocationParkingSite” Class

An instance of the “SpecialLocationParkingSite” class shall be used when specifying a parking site, which is directly linked to some special location like a train station, leisure park, shopping centre etc.

#### 8.4.2.6 “ParkingUsageScenario” Class

An instance of the “ParkingUsageScenario” class shall specify a special usage scenario for a parking site or for a (group of) parking space(s), optionally linked with a validity period. Examples for scenarios are Truck Parking, park & ride, car sharing or event parking.

Instances of the class “ParkingUsageScenario” shall be indexed in order to reference the corresponding objects in the dynamic part of the Parking Publications model in class “ParkingUsageScenarioStatus”.

When using the “truckParking” scenario, the attribute “truckParkingDynamicManagement” may specify compact parking or queue parking, which are special types of truck parking management (see Clause C.1.12 for details).

When using the “eventParking” scenario, the attributes “eventParkingType” or “eventParkingType2” may specify the corresponding event.

NOTE The enumeration “PublicEventTypeEnum”, which is used by the attribute “eventParkingType” is standardised in CEN/TS 16157 Part 3. Thus, it is part of DATEX Level A. As this list of elements is not sufficient

for the purpose of this Part, a second enumeration “PublicEventType2Enum” with additional literals is specified here in this Part (used by attribute “eventParkingType2”).

## 8.5 The “PolygonArea” package

### 8.5.1 Overview of the “PolygonArea” package

The “PolygonArea” package (see Figure 9) shall provide possibilities to describe a geographical bounded area. The “Area” class defined in CEN/TS 16157-2 shall be extended for this purpose.

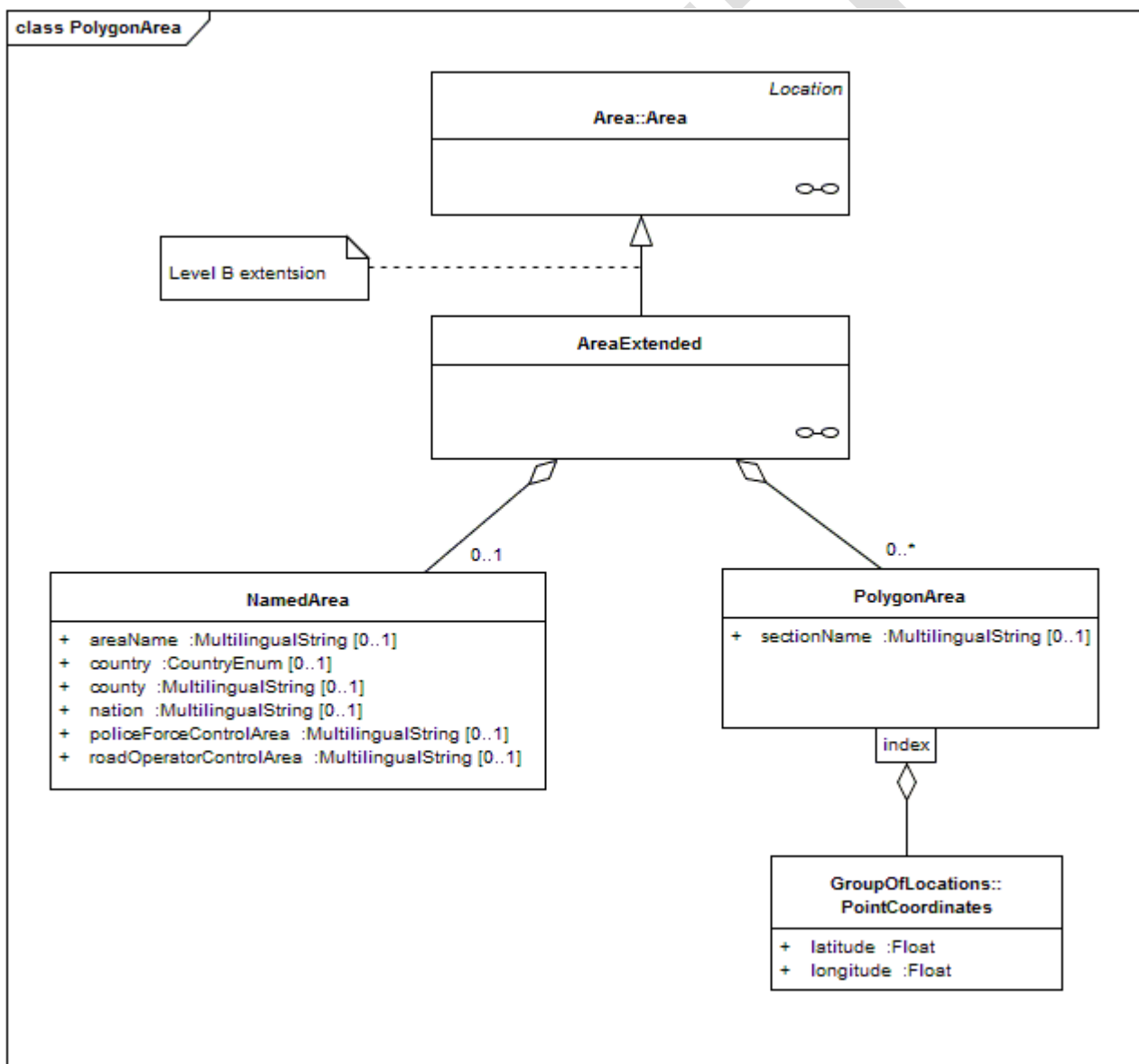


Figure 9 — The “PolygonArea” package class model

## 8.5.2 Semantics of the “PolygonArea” package

### 8.5.2.1 “PolygonArea” package semantics – general

An area – represented by an “AreaExtended” instance - may be described with instances of the “Polygon Area” and/or “GeographicArea” classes.

### 8.5.2.2 “AreaExtended” Class

The “AreaExtended” class is a helper class to attach the “GeographicArea” and “PolygonArea” classes. It shall be specified as a DTEX II “Level B extension”.

### 8.5.2.3 “PolygonArea” Class

An instance of the “PolygonArea” class shall describe the location of an area in terms of a closed polyline. This shall be done with a number of ordered coordinates (class “PointCoordinates”, defined in CEN/TS 16157-2).

### 8.5.2.4 “NamedArea” Class

An instance of the “NamedArea” class shall describe the location of an area in terms of the area name itself, a country, county, nation, police force control area or road operator control area. If more than one of these descriptors is used, the smallest geographic intersection of them defines the resulting area.

**NOTE** If this class is used together with a Georeference for an area, it is assumed that this class defines a name for the area given by the Georeference. You need to beware of creating ambiguities (e.g. the Polygon area of some city correlated to some false country).

## 8.6 The “OpeningTimes” package

### 8.6.1 Overview of the “OpeningTimes” package

The “OpeningTimes” package (see Figure 10) uses and extends the “Validity” package defined in CEN/TS 16157-3 to provide a generic structure for opening times. In the context of the Parking Publications, the “OpeningTimes” package may be used for specifying

- opening times for a parking site
- opening times for parking accesses
- and the availability times for equipment or opening times for service facilities.

**NOTE** In addition, the “OverallPeriod” class may be used to specify a validity for

- charge bands
- contacts
- parking status
- parking usage scenario
- and parking vehicle

directly (i.e. without using the “OpeningTimes” class).

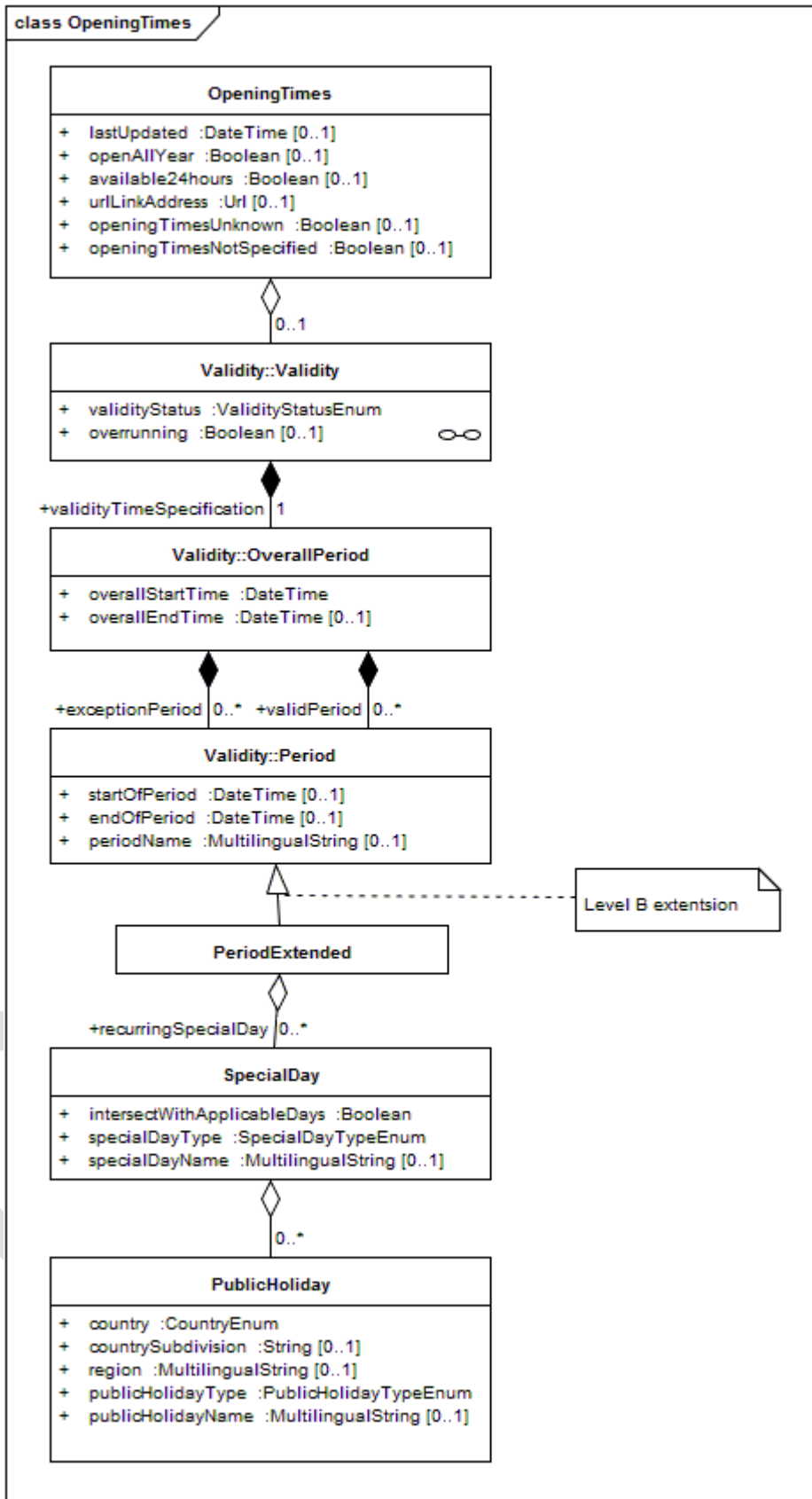


Figure 10 — The “OpeningTimes” package class model

## 8.6.2 Semantics of the “OpeningTimes” package

### 8.6.2.1 “OpeningTimes” package semantics – general

The “OpeningTimes” package shall support provision of information to describe opening times, i.e. valid times for the availability or usability of a building, service facility etc.

### 8.6.2.2 “OpeningTimes” Class

An instance of the “OpeningTimes” class shall describe the availability or usability ('opening times') of a building, service facility etc.in terms of the “Validity” class defined in CEN/TS 16157-3. In the context of the Parking Publications, opening times may be specified for a parking site, for parking accesses or for service facilities as well as for the availability times of equipment.

The class shall provide attributes for a timestamp of the last update, for the indication of 24 hour or all-year opening, for a URL with further opening time information as well as for the indication of unknown or unspecified opening times.

### 8.6.2.3 “PeriodExtended” Class

The “PeriodExtended” class shall be a technical construct to attach the “SpecialDay” and “PublicHoliday” classes to the DATEX II Level A model. It shall be specified as a DATEX II “Level B extension”.

### 8.6.2.4 “SpecialDay” Class

In addition to CEN/TS 16157-3, periods may also be specified in terms of recurring special days (e.g. market day, school day, Election Day, etc.) with one or more instances of the “SpecialDay” class. The special day shall be defined out of an enumeration or by a custom name.

The attribute “intersectWithApplicableDays” shall specify, whether the intersection or the union of special day(s) and other recurring day specifications of DATEX II Level A is considered.

**EXAMPLE** Together with the DATEX II Level A part (not completely shown in Figure 10), you can specify examples like “on Sundays and public holidays” or “on Thursdays, Fridays but not on market days” now.

If the special day is a public holiday, it may be further specified with the “PublicHoliday” class.

### 8.6.2.5 “PublicHoliday” Class

An instance of the “PublicHoliday” class may specify a day as a holiday in a specific country and region.

## 8.7 The “ParkingAccess” package

### 8.7.1 Overview of the “ParkingAccess” package

The “ParkingAccess” package (see Figure 11) shall support information about entrances, exits or both belonging to parking sites. It uses an aggregation to the “Location” class defined in CEN/TS 16157-2.

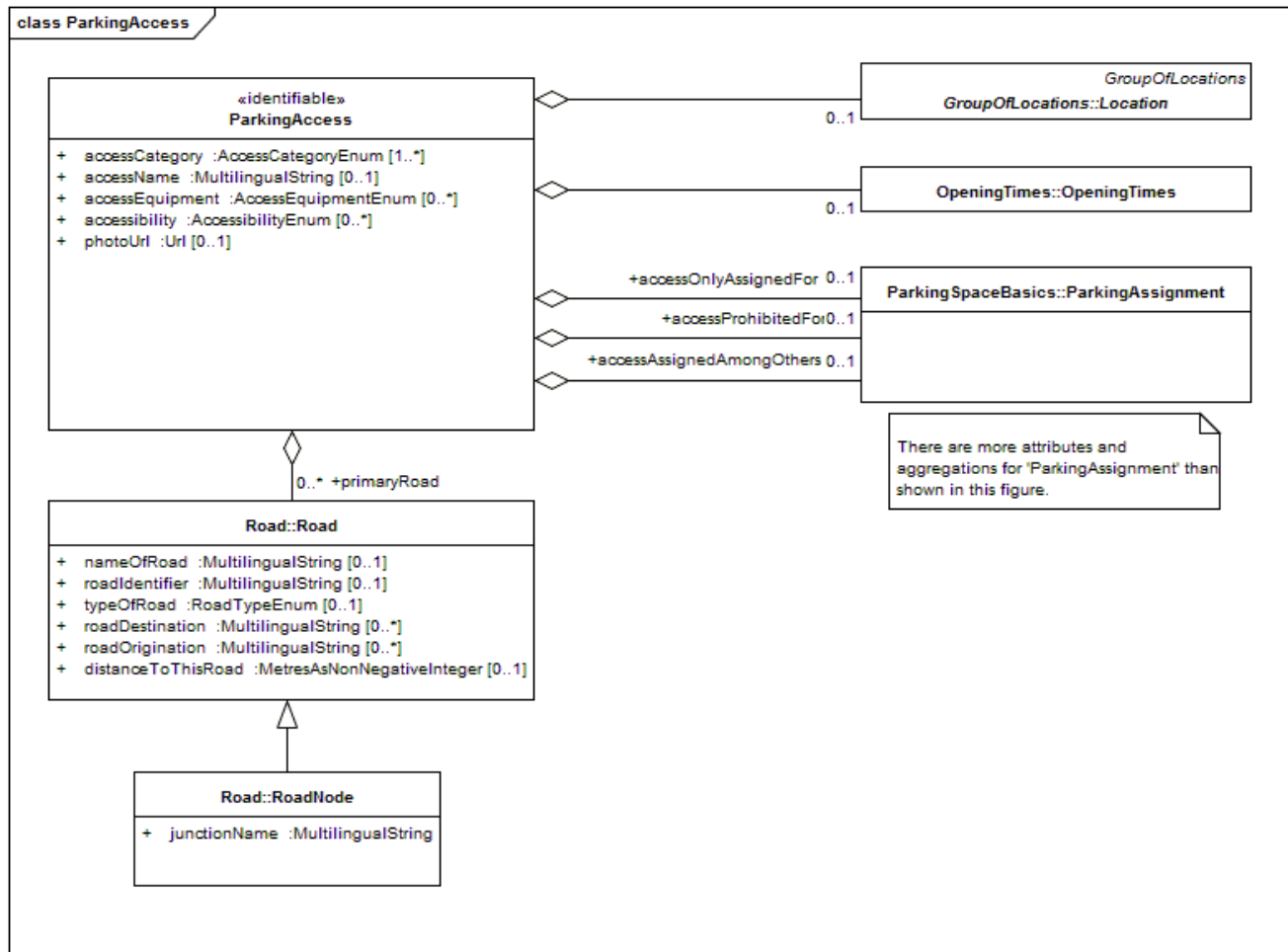


Figure 11 — The “ParkingAccess” package class model and the “Road” package class model

### 8.7.2 Semantics of the “ParkingAccess” package

#### 8.7.2.1 “ParkingAccess” package semantics – general

The package “ParkingAccess” shall provide information about entrances, exits or both belonging to parking sites.

#### 8.7.2.2 “ParkingAccess” Class

Each instance of the “ParkingAccess” class shall describe one entrance, one exit or both in one. The location shall be given in form of a “Location” (defined in CEN/TS 16157 Part 2) and may be supplemented by information of the “Road” class (see Clause 8.8).

The access shall be detailed by one or more categories (vehicle entrance, pedestrian exit, rental car return, emergency exit etc.) and may be enriched by information about accessibility (barrier free, wheelchair accessible etc.), a name, equipment (barrier, ticket machine etc.), or a photo URL.

Using the “ParkingAssignment” class defined in Clause 8.12.2.4 specific allowed or not allowed assignment for this access may be specified, such as specific user groups (for example long- or short-term parkers) or vehicles with specific characteristics etc.

## **8.8 The “Road” package**

### **8.8.1 Overview of the “Road” package**

The “Road” package (see Figure 11 in Clause 8.7.2.1) shall support provision of information about one road or a road node on this road.

### **8.8.2 Semantics of the “Road” package**

#### **8.8.2.1 “Road” package semantics – general**

The package “Road” shall provide information about one road or a road node on this road.

#### **8.8.2.2 “Road” Class**

An instance of the “Road” class may support provision of information about the name of the road, the road identifier, the road type, its destination and origin (in form of multilingual strings) and the distance to this road (the reference point for this distance depends on the target object).

The “Road” class may be specialised using the “RoadNode” class.

In the context of the Parking Publications, a number of primary neighbouring roads may be specified (i.e. primary roads, from which the parking site is accessible).

#### **8.8.2.3 “RoadNode” Class**

The “RoadNode” class shall be a specialisation of the “Road” class and shall define a road node of type junction on the road given by the “Road” class’s elements. As the primary use for this class is to describe a road node of type junction (e.g. on a motorway), the road node shall be specified by the corresponding junction name.

## 8.9 The “ParkingEquipmentOrServiceFacility” package

### 8.9.1 Overview of the “ParkingEquipmentOrServiceFacility” package

The “ParkingEquipmentOrServiceFacility” package (see Figure 12) may support providing detailed information about available equipment or service facilities on the parking site or on a (group of) parking space(s).

It may provide additional information about electric charging stations.

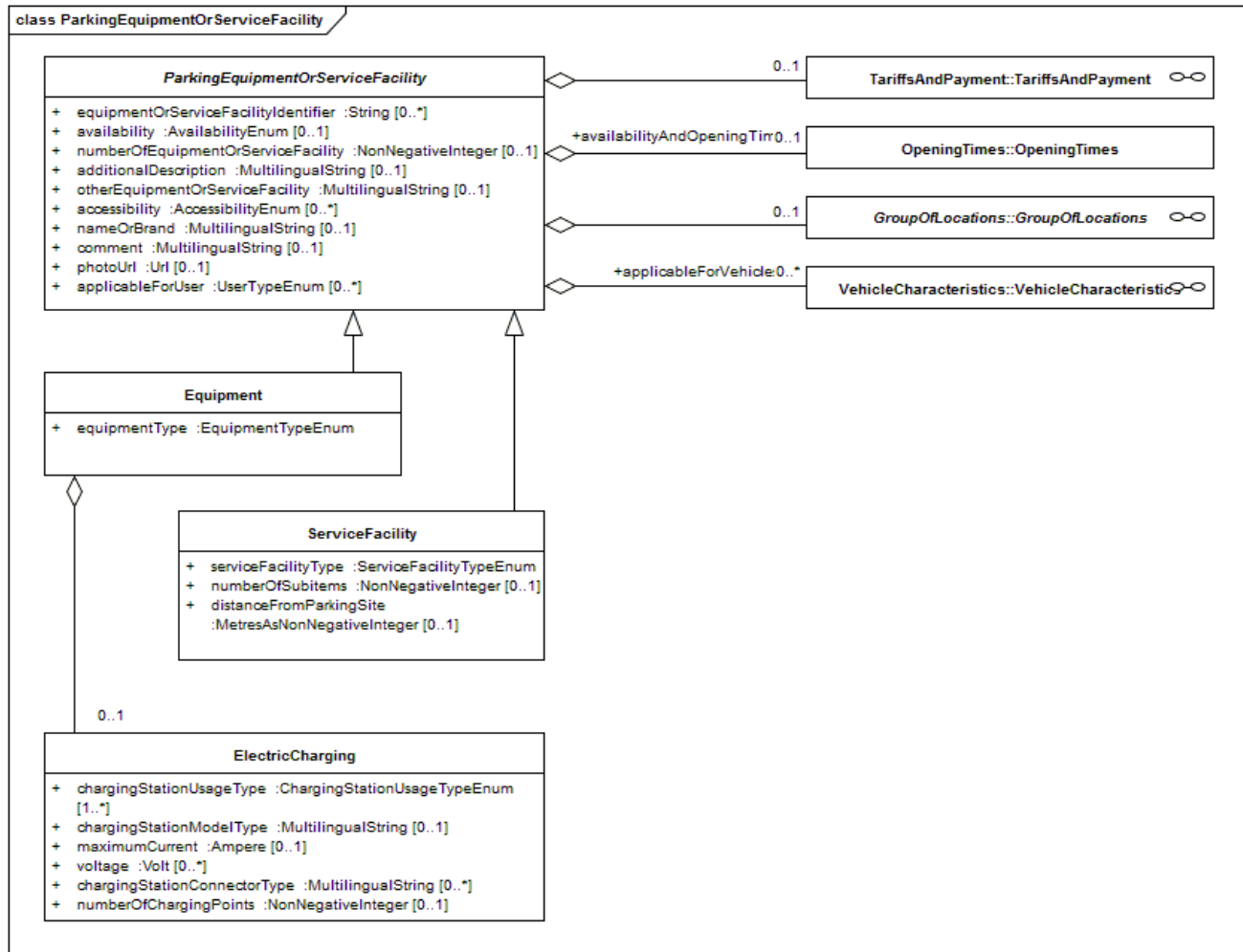


Figure 12 — The “ParkingEquipmentOrServiceFacility” package class model

### 8.9.2 Semantics of the “ParkingEquipmentOrServiceFacility” package

#### 8.9.2.1 “ParkingEquipmentOrServiceFacility” package semantics – general

The package “ParkingEquipmentOrServiceFacility” shall describe exactly one type of available equipment or one type of service facility that is available on the parking site or on a (group of) parking space(s).

Available equipment is some infrastructure element that provides a service or capability to users; Examples are toilets, elevators, internet access or waste bins. Example of service facilities are restaurants, petrol stations or a truck wash.



The class “ParkingEquipmentOrServiceFacility” shall be abstract and shall be specialised by one instance out of “Equipment” or “ServiceFacility”.

For the specification of further details of the equipment ‘electric charging station’, the class “ElectricCharging” may be used.

In the dynamic part of the model, a reference to each element may be used to give explicit information about the availability of the specific element.

### 8.9.2.2 “ParkingEquipmentOrServiceFacility” Class

Each instance of the “ParkingEquipmentOrServiceFacility” class shall describe exactly one type of available equipment or one type of service facility that is available on the parking site or on a (group of) parking space(s) (here within further called ‘element’).

The element may be enhanced with additional information, for example

- its number or its availability in boolish terms,
- a description and a comment,
- the name or brand of the service provided,
- accessibility information (e.g. handicapped or wheelchair accessible),
- restriction to particular users,
- opening times (class “OpeningTimes”, see Clause 8.6.2.2),
- a fee (class “TariffsAndPayment” in Clause 8.10),
- its location (class “GroupOfLocations”, defined in CEN/TS 16157-2)
- or applicable vehicles, defined by their characteristics (class “VehicleCharacteristics”, defined in CEN/TS 16157-3).

The number of the element – with respect to the restrictions mentioned above - may be defined for each element by the attribute “numberOfEquipmentOrServiceFacility”.

**EXAMPLES** 5 toilets, 1 restaurant, 2 toilets for handicapped people, 2 toilets for men; note that for each example one instance of the class “ParkingEquipmentOrServiceFacility” is necessary.

Opening times for the element may be specified (i.e. a regular time schedule, at which the element should be available or open). Examples would be the opening times of toilets or restaurants. Please note that different opening times (e.g. for more than one restaurant) require multiple instances of the “ParkingEquipmentOrServiceFacility” class.

The current availability of the element may be specified in the dynamic part of the Parking Publications model in the class “ParkingEquipmentOrServiceFacilityStatus”.

**NOTE** For service facilities, it is possible to define the amount of sub items within the specialisation class. Thus, for example, it is possible to define that there are 5 restaurants with 300 restaurant places in total or 1 medical facility with 2 surgeries. See Table 1 for details.

### 8.9.2.3 “Equipment” Class

Each instance of the “Equipment” class shall define exactly one type of equipment (e.g. toilets, elevators, wireless internet etc.) available on the parking site or on a (group of) parking space(s).

### 8.9.2.4 “ServiceFacility” Class

Each instance of the “ServiceFacility” class shall define exactly one type of service facility (e.g. restaurants, shops etc.) available on or accessible from the parking site. For the latter case, the distance between parking site and service facility may be specified with attribute “distanceFromParkingSite”.

The number of subitems for this service facility may be specified (example: total number of restaurant places). Table 1 shall specify the usage of the attributes “numberOfEquipmentOrServiceFacility” and “numberOfSubitems” for each literal of “ServiceFacilityTypeEnum”. If there is a hyphen character in the table, use of the “numberOfSubitems” attribute is not permitted in this case.

**Table 1: Semantics of the amount of additional service facility sub items**

"serviceFacilityType"	"numberOfEquipmentOrServiceFacility"	"numberOfSubitems"
hotel	number of hotels	total number of hotel rooms
motel	number of motels	total number of motel rooms
overnightAccommodation	number of overnight accommodations	total number of overnight accommodation spaces
shop	number of shops	-
kiosk	number of kiosks	-
foodShopping	number of food shopping facilities	-
cafe	number of cafes	total number of cafe places
restaurant	number of restaurants	total number of restaurant places
restaurantSelfService	number of self-service restaurants	total number of self-service restaurant places
motorwayRestaurant	number of motorway restaurants	total number of motorway restaurant places
motorwayRestaurantSmall	number of small motorway restaurants	total number of small motorway restaurant places
sparePartsShopping	number of spare parts shopping facilities	-
petrolStation	number of petrol stations	total number of fuel dispensers
vehicleMaintenance	number of vehicle maintenance facilities	total number of vehicle maintenance places
tyreRepair	number of tyre repair facilities	total number of tyre repair places
truckRepair	number of truck repair facilities	total number of truck repair places
truckWash	number of truck wash facilities	total number of truck washing lines
carWash	number of car wash facilities	total number of car washing lines
pharmacy	number of pharmacies	-
medicalFacility	number of medical facilities	total number of surgeries
police	number of police stations	total number of police station counters
touristInformation	number of tourist information	total number of tourist information counters
bikeSharing	number of bike sharing facilities	total number of available bikes (roughly)
docstop	number of doc stop facilities	total number of surgeries
laundry	number of laundries	total number of washing machines
leisureActivities	number of leisure activity facilities	-
unknown	-	-
other	<i>depends on "otherEquipmentOrServiceFacility" (free text)</i>	

**Note:** The number of sub items always implies that they can be used simultaneously.

Thus for most elements this means a sufficient number of employees (tourist information, police, vehicle maintenance, ...)

**8.9.2.5 “ElectricCharging” Class**

An instance of the class “ElectricCharging” may be only used in case the value of the attribute “equipmentType” (in class “Equipment”) is specified as “electricChargingStation”. Additional information like the usage (charging for vehicles, motorcycles, motorhomes, etc.), type and connector type as well as voltage and maximum current may be specified with this class. In the case where information concerning more than one electric charging station with different parameters are to be published, the class “Equipment” has to be specified more than once.

The number of vehicles or devices, which can be charged simultaneously (sum over all electric charging stations specified with the “numberOfEquipmentOrServiceFacility” attribute) may be specified with the attribute “numberOfChargingPoints”.

## 8.10 The “TariffsAndPayment” package

### 8.10.1 Overview of the “TariffsAndPayment” package

The “TariffsAndPayment” package (see Figure 13) shall support provision of information about tariffs and payment. In the context of the Parking Publications model, these can be fees for using a parking record or for using equipment or service facilities (e.g. toilets).

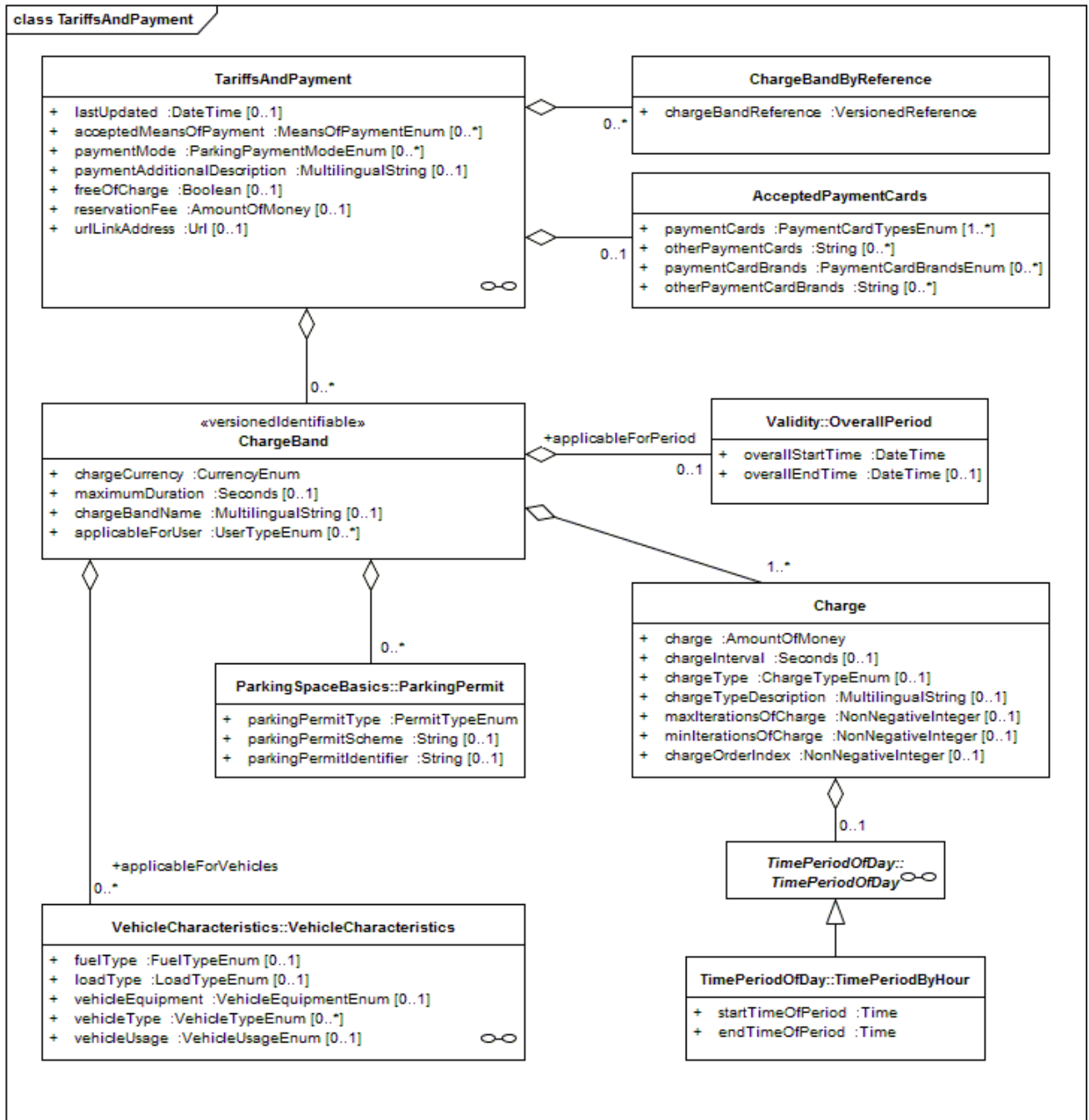


Figure 13 — The “TariffsAndPayment” package class model

## 8.10.2 Semantics of the “TariffsAndPayment” package

### 8.10.2.1 “TariffsAndPayment” package semantics – general

The package “TariffsAndPayment” provides a model for (parking) fees, including reservations and season tickets. Different types of charges can be defined according to periods, groups of persons or for different types of vehicles.

### 8.10.2.2 “TariffsAndPayment” Class

An instance of the “TariffsAndPayment” class shall provide basic information about the (parking) fees such as the accepted means of payment (e.g. cash, payment card etc.), the mode for payment operations (e.g. pay and display, pay by prepaid token, etc.), free parking, etc. Information about a reservation fee and details of accepted payment cards may be also provided. The information may be enhanced by defining the exact fees using the following classes.

Either a charge band may be defined using the class “ChargeBand” or a previously defined charge band may be referenced by using the class “ChargeBandByReference”.

### 8.10.2.3 “ChargeBandByReference” Class

An instance of this class shall reference a previously defined charge band.

### 8.10.2.4 “ChargeBand” Class

An instance of the “ChargeBand” class shall define a set of charges (a ‘charge band’). It shall comprise at least one charge element.

The applicability of the charge band may depend on a period (class “OverallPeriod”, defined in CEN/TS 16157-3), on user types and/or on vehicle types (class “VehicleCharacteristics”, defined in CEN/TS 16157-3).

The applicability of the charge band may be further linked to special parking permits defined in the class “ParkingPermit” (see Clause 8.12.2.5).

### 8.10.2.5 “Charge” Class

Each instance of the “Charge” class shall define one charge that is valid for the corresponding “ParkingChargeBand”. Forcing a special order or follow up of the charges within the charge band may be specified with the three attributes “chargeOrderIndex”, “minIterationsOfCharge” and “maxIterationsOfCharge”. Thus it may be possible to define constructs like ‘first three hours free’, or ‘first 24 hours for 10 Euro, afterwards 5 Euro per day, but not longer than 10 days’.

The charge may be linked to an interval and may be defined within a specified period by hour (class “TimePeriodByHour”, defined in CEN/TS 16157-3).

## 8.11 The “ParkingSpace” package

### 8.11.1 Overview of the “ParkingSpace” package

The “ParkingSpace” package (see Figure 14) shall support provision of information about an individual parking space (class “ParkingSpace”) as well as groups of parking spaces (class “GroupOfParkingSpaces”). Both classes shall be specializations of the class “ParkingSpaceBasics” defined in Clause 8.12.2.2.

A group of parking spaces may define its sub elements in form of instances of “ParkingSpace”.

Using an instance of “ParkingSpaceBasics” with specialisation “GroupOfParkingSpaces” shall force the usage of role “groupOfParkingSpaces” from class “ParkingRecord” in combination with quantifier “groupIndex”.

Using an instance of “ParkingSpaceBasics” with specialisation “ParkingSpace” shall force the usage of role “parkingSpace” from class “ParkingRecord” in combination with quantifier “parkingSpaceIndex”.

Using the aggregation between “GroupOfParkingSpaces” and “ParkingSpace” shall force the usage of the quantifier “parkingSpaceIndex”.

Each value for the “parkingSpaceIndex” quantifier shall be unique within the common scope of its two occurrences.

NOTE Instances defined with qualifiers may be referenced in the dynamic part of the model. There will be no distinction in the dynamic part, whether a parking space was defined within a parking record or within a group of parking spaces.

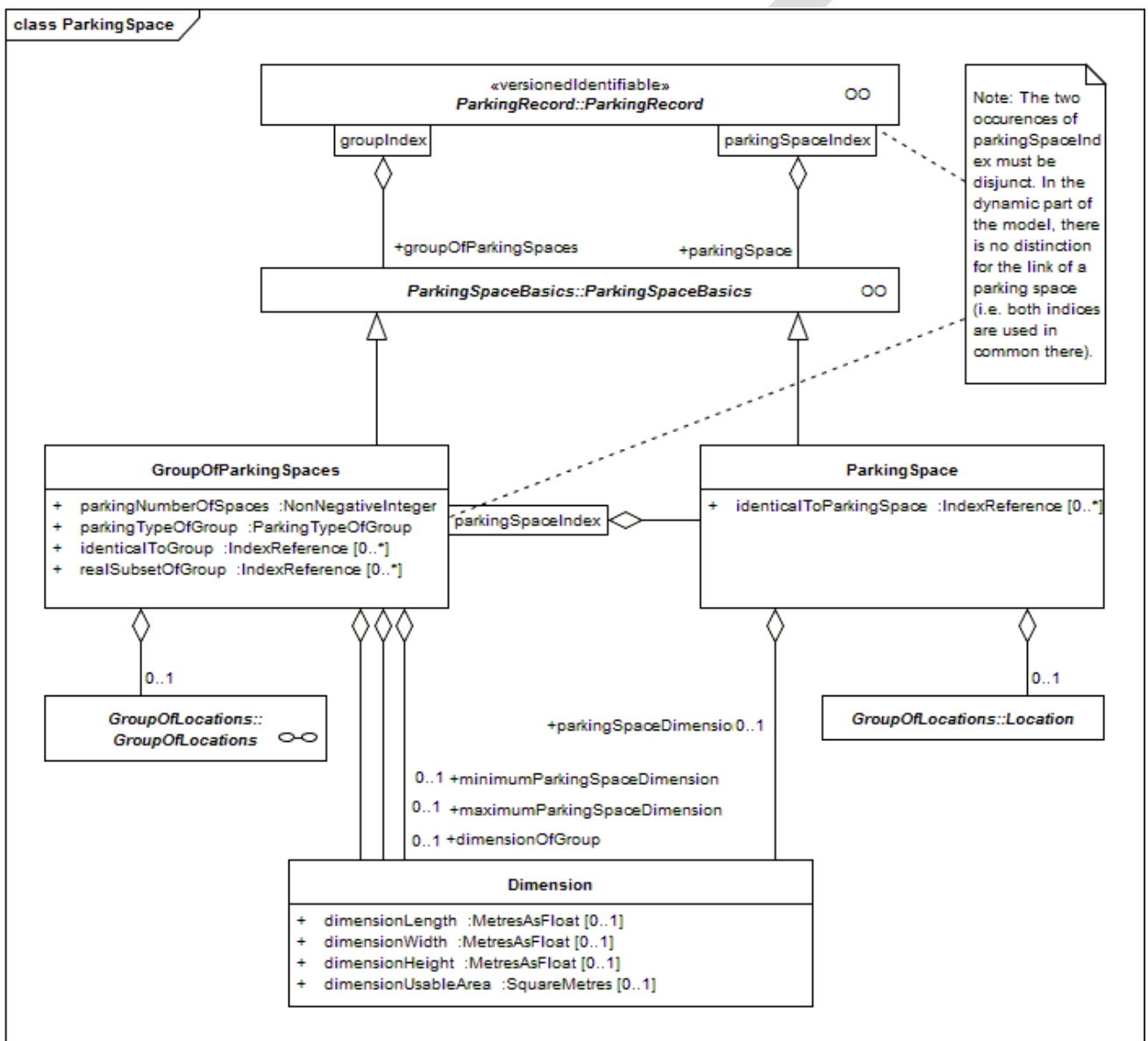


Figure 14 — The “ParkingSpace” package class model

## 8.11.2 Semantics of the “ParkingSpace” package

### 8.11.2.1 “ParkingSpace” package semantics – general

The “ParkingSpace” package shall be used to define single parking spaces (class “ParkingSpace”) or groups of parking spaces (class “GroupOfParkingSpaces”). For both classes, common properties may be specified in the class “ParkingSpaceBasics” (see Clause 8.12.2.2).

Parking spaces may be defined as being part of a parking record or as being part of a group of parking spaces.

Both parking spaces and groups of parking spaces may be referenced in the dynamic part of the model.

### 8.11.2.2 “ParkingSpace” Class

Each instance of this class shall describe a single parking space, i.e. a place envisaged for one vehicle. Its dimensions may be specified with an instance of the class “Dimension”. All further properties of a parking space are defined in class “ParkingSpaceBasics” (see Clause 8.12.2.2). There may be multiple specifications of the same parking space in case its assignment differs over time. Therefore, the attribute “identicalToParkingSpace” may be used to create references between several logical specifications of the same physical parking space.

Information about the occupancy of each space may be given in the dynamic part of the Parking Publications model in the class “ParkingSpaceStatus” (see Clause 9.3.2.6).

### 8.11.2.3 “GroupOfParkingSpaces” Class

Each instance of this class shall describe a group of parking spaces including their number.

Grouped parking spaces are parking spaces with a set of identical properties that can be considered as a coherent group. These identical properties shall be defined in the package “ParkingSpaceBasics” (see Clause 8.12). Properties, which are not identical across the group, shall not be specified.

The intention for creating the group shall be specified with attribute “parkingTypeOfGroup”. Examples are adjacent or nonadjacent parking spaces, specifying a complete floor etc.

The minimum dimension values of all included parking spaces may be specified with an instance of the class “Dimension”.

NOTE There is no need for a physical space of this minimum dimension.

The dimensions of the largest space of all included parking spaces may be specified with an instance of the class “Dimension”.

NOTE There must be at least one space of this maximum dimension. If the comparison of dimension values is not unique, the length is decisive.

The dimension of a virtual rectangle encapsulating the group of parking spaces may be specified with an instance of the class “Dimension”.

There may be multiple specifications of the same group of parking spaces or overlapping groups of parking spaces in case their assignment differs over time. Therefore, the attributes “identicalToGroup” or “realSubsetOfGroup” may be used to create references between several logical specifications of the same group of parking spaces or real subsets of other groups.

Detailed information about the occupancy of the group of parking spaces may be given in the dynamic part of the Parking Publications model in the class “ParkingOccupancy” (see Clause 9.3.2.7).

### 8.11.2.4 “Dimension” Class

Each instance of the “Dimension” class may be used to define dimensions (length, width, height, usable area) of some object. In the context of the Parking Publications, these may be the dimensions of a (group of) parking space(s), the dimensions of the parking record or minimum/maximum dimensions for parking spaces within a group.

NOTE The dimension of a parking record is not visualised in Figure 14, but in Figure 3.

## 8.12 The “ParkingSpaceBasics” package

### 8.12.1 Overview of the “ParkingSpaceBasics” package

The “ParkingSpaceBasics” package (see Figure 15) shall support provision of information for a single parking spaces (class “ParkingSpace”, see Clause 8.11.2.2) as well as for single parking spaces forming a group of parking spaces (class “GroupOfParkingSpaces”, see Clause 8.11.2.3).

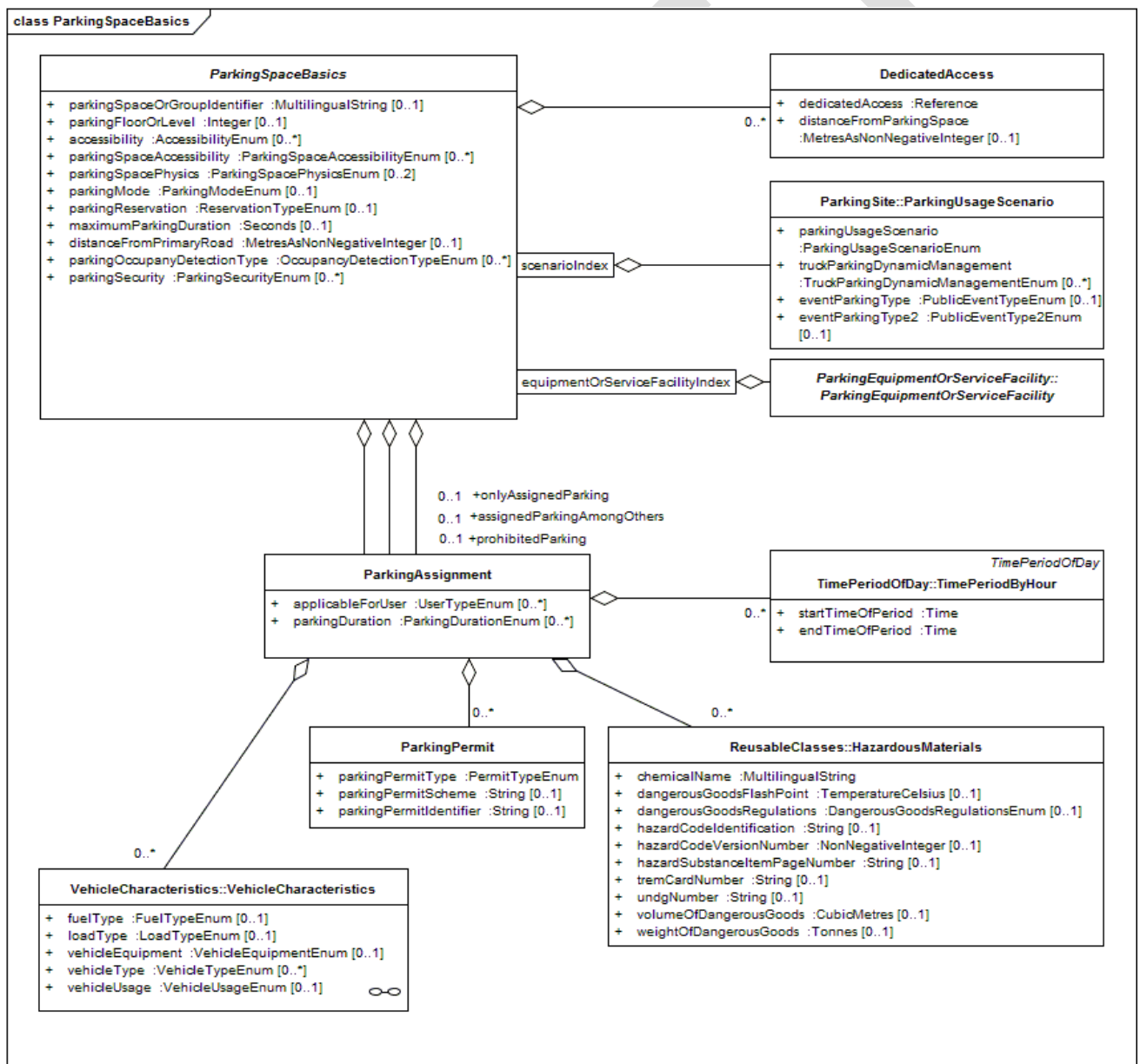


Figure 15 — The “ParkingSpaceBasics” package class model

## 8.12.2 Semantics of the “ParkingSpaceBasics” package

### 8.12.2.1 “ParkingSpaceBasics” package semantics – general

The “ParkingSpaceBasics” package describes basic properties of a parking space (see class ParkingSpaceBasics), assigned entrances or exits (class DedicatedAccess), assigned equipment or service facilities (see class ParkingEquipmentOrServiceFacility).

Furthermore, special assignments (users, vehicles, time-based) may be specified to qualify specific validity or prohibition (class ParkingAssignment).

Using an instance of the “ParkingUsageScenario” class shall force the usage of quantifier “scenarioIndex”.

Each value for the “scenarioIndex” quantifier shall be unique within the common scope of its two occurrences in class “ParkingSite” and all instances of “ParkingSpaceBasics”.

NOTE Instances defined with qualifiers may be referenced in the dynamic part of the model. There will be no distinction in the dynamic part, whether a usage scenario was defined within a parking site or within a (group of) parking space(s).

Using an instance of the “ParkingEquipmentOrServiceFacility” class shall force the usage of quantifier “equipmentOrServiceFacilityIndex”.

Each value for the “equipmentOrServiceFacilityIndex” quantifier shall be unique within the common scope of its two occurrences in class “ParkingRecord” and all instances of “ParkingSpaceBasics”.

NOTE Instances defined with qualifiers may be referenced in the dynamic part of the model. There will be no distinction in the dynamic part, whether an equipment or service facility was defined within a parking record or within a (group of) parking space(s).

### 8.12.2.2 “ParkingSpaceBasics” Class

An instance of the “ParkingSpaceBasics” class shall give information about the parking space such as reservation requirements, security measures or accessibility. The physical characteristics of the parking site (e.g. open air), parking mode (e.g. parallel) or the maximum parking duration may also be specified.

NOTE For a group of parking spaces (class GroupOfParkingSpaces), all information provided in class ParkingSpaceBasics shall be identical for all parking spaces within the group. Only information that has not been provided may differ within the group.

### 8.12.2.3 “DedicatedAccess” Class

An instance of the “DedicatedAccess” class may point to an instance of an assigned access (class ParkingAccess, see Clause 8.7.2.2), i.e. the parking spaces in question are accessible from this entrance or exit.

### 8.12.2.4 “ParkingAssignment” Class

Instances of the “ParkingAssignment” class may be created for the roles “assignedParkingAmongOthers”, “onlyAssignedParking” or “prohibitedParking”. These roles may be invoked with restrictions regarding types of persons, parking duration, vehicle characteristics (class “VehicleCharacteristics”, defined in CEN/TS 16157-3), time (class “TimePeriodByHour”, defined in CEN/TS 16157-2) or hazardous materials (class “HazardousMaterials”, defined in CEN/TS 16157-3).

### 8.12.2.5 “ParkingPermit” Class

Each Instance of the “ParkingPermit” class shall define one specific parking permit with mandatory type and optional scheme and/or identifier.



### 8.13 The “VehicleCharacteristicsExtension” package

#### 8.13.1 Overview of the “VehicleCharacteristicsExtension” package

The “VehicleCharacteristicsExtension” package (see Figure 16) shall support information in addition to the class “VehicleCharacteristics” defined in CEN/TS 16157-3.

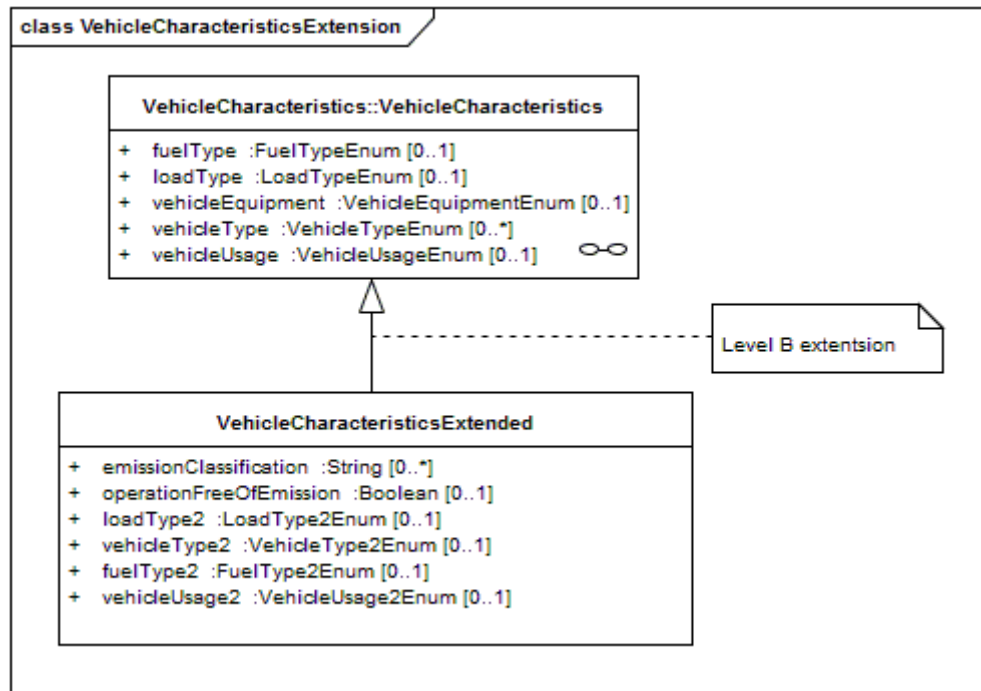


Figure 16 — The “VehicleCharacteristicsExtension” package class model

#### 8.13.2 Semantics of the “VehicleCharacteristicsExtension” package

##### 8.13.2.1 “VehicleCharacteristicsExtended” Class

The class “VehicleCharacteristicsExtended” shall be specified as a DATEX II “Level B extension”.

An instance of the “VehicleCharacteristicsExtended” class may provide additional information on the “vehicleType” (e.g. motorhome, minibus), the “loadType” (e.g. refrigerated goods), the “fuelType” (e.g. information about different forms of engine propulsion), the “vehicleUsage” (e.g. city logistics), special permits (e.g. government parking permit) and emission characteristics currently not supported in class “VehicleCharacteristics”.

## 8.14 The “Junction” package

### 8.14.1 Overview of the “Junction” package

The “Junction” package (see Figure 17) shall support provision of additional information to describe a point (class “Point” defined in CEN-TS 16157-2).

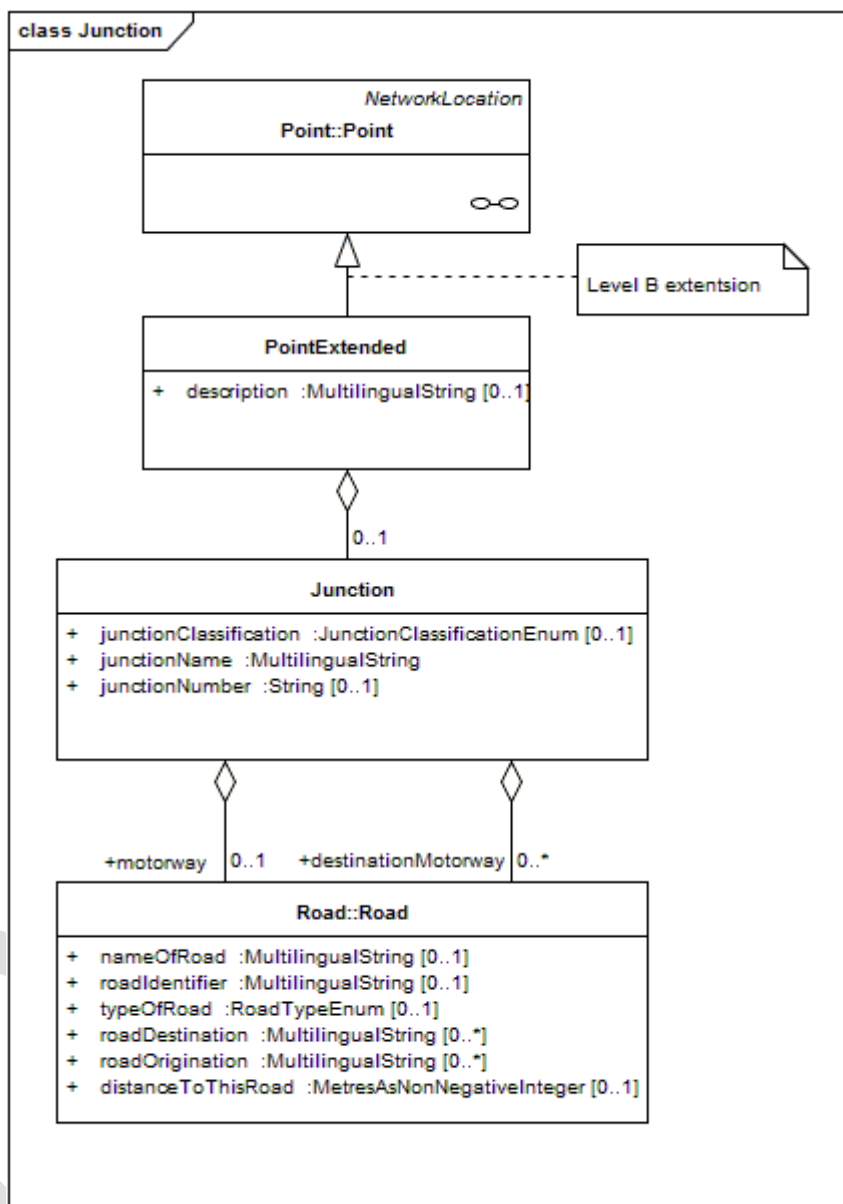


Figure 17 — The “Junction” package class model

### 8.14.2 Semantics of the “Junction” package

#### 8.14.2.1 “Junction” package semantics – general

To specify a junction, the “Junction” class may be used as an additional method for point georeference defined in CEN/TS 16157-2.

### 8.14.2.2 “PointExtended” Class

The class “VehicleCharacteristicsExtended” shall be specified as a DATEX II “Level B extension” and shall be a technical helper class to attach the “Junction” class.

### 8.14.2.3 “Junction” Class

An instance of the “Junction” class may provide information about a (motorway-) junction: classification (i.e. its type), name and number. The motorway in question may be specified using the “Road” class (see Clause 8.8.2.2). If the junction type corresponds to any type of interchange, a destination motorway may be specified in addition.

## 8.15 The “ParkingStandardsAndSecurity” package

### 8.15.1 Overview of the “ParkingStandardsAndSecurity” package

The “ParkingStandardsAndSecurity” package (see Figure 18) shall support provision of information about security measures or the LABEL service and security classification [2, 3] of a parking site

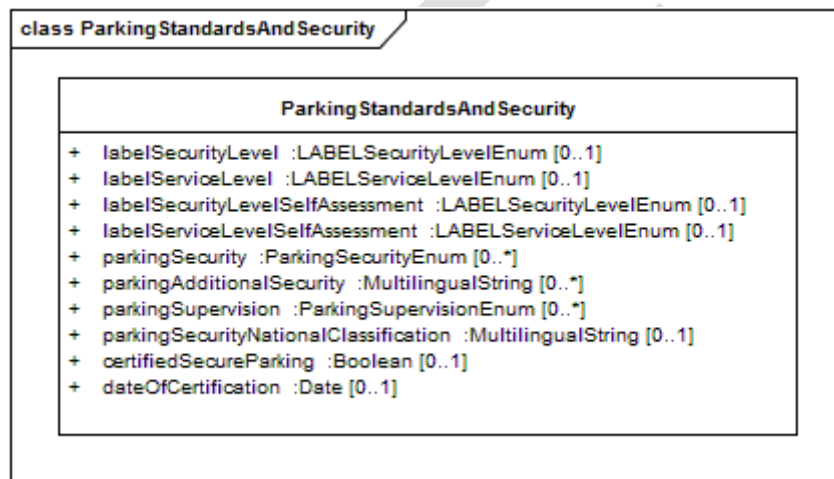


Figure 18 — The “ParkingStandardsAndSecurity” package class model

### 8.15.2 Semantics of the “ParkingStandardsAndSecurity” package

#### 8.15.2.1 “ParkingStandardsAndSecurity” Class

An instance of the “ParkingStandardsAndSecurity” class may give information about security measures on the parking site (e.g. fences, security service, etc.), about the policy of supervision as well as about the “LABEL”<sup>1</sup> classification (formal assessment as well as self-assessment).

<sup>1</sup> <http://truckparkinglabel.eu/>

## 9 The Parking Status Publication model

### 9.1 Overview of the Parking Status Publication model

The Parking Status Publication model comprises a number of packages, with the “ParkingStatusPublication” package providing the entry point to the dynamic part of the Parking Publications model, which utilise some classes from the “ReusableClasses” package defined in CEN/TS 16157-3.

The corresponding schema for the Parking Status Publication model can be found in normative Annex H of this document.

### 9.2 The “ParkingStatusPublication” package

#### 9.2.1 Overview of the “ParkingStatusPublication” package

The “ParkingStatusPublication” package (see Figure 19) shall form the entry point for the dynamic part of the Parking Publications model.

The value of the “genericPublicationName” attribute shall be defined as “ParkingStatusPublication”.

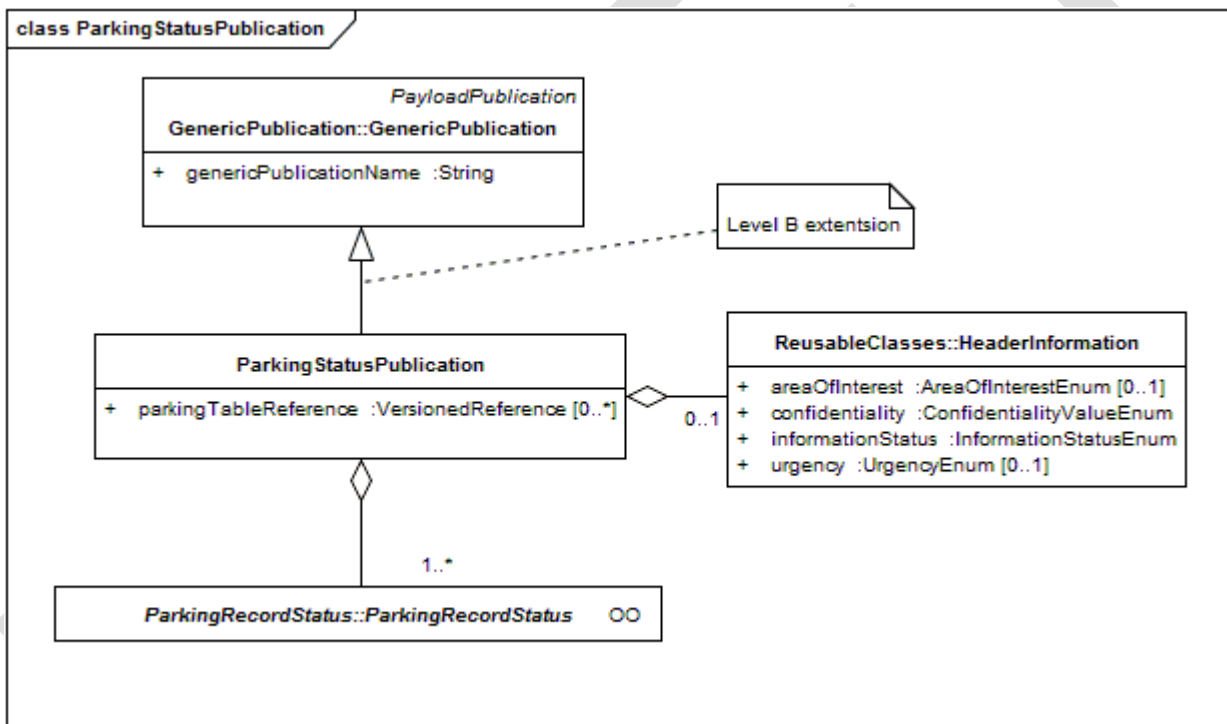


Figure 19 — The “ParkingStatusPublication” package class model

#### 9.2.2 Semantics of the “ParkingStatusPublication” package

##### 9.2.2.1 “ParkingStatusPublication” Class

The “ParkingStatusPublication” class is a specific realisable case of a “GenericPublication”. It shall be specified as a DATEX II “Level B extension”.

Each “ParkingStatusPublication” may reference to zero, one or more “ParkingTable” from the static part of the model.

Each “ParkingStatusPublication” shall contain one or more instances of class “ParkingRecordStatus” (see Clause 9.3.2.2), thus it is the base class for containment of the published parking status information.

Each instance of a “ParkingStatusPublication” may have associated metadata contained in an instance of the “HeaderInformation” class, which allows the supplier of the “ParkingStatusPublication” to specify how the recipient should treat the information contained in it. This class is already defined in the Part 3 of CEN/TS 16157.

### 9.3 The “ParkingRecordStatus” package

#### 9.3.1 Overview of the “ParkingRecordStatus” package

The “ParkingRecordStatus” package (see Figure 20, Figure 21 and Figure 22) shall support provision of status information (for example occupancy, availability etc.) for parking sites, groups of parking sites, parking spaces and group of parking spaces as well as status information for a number of other specific elements from the static part of the Parking Publications model (routes, usage scenarios, equipment and service facilities etc.).



Figure 20 — The “ParkingRecordStatus” package class model (I)

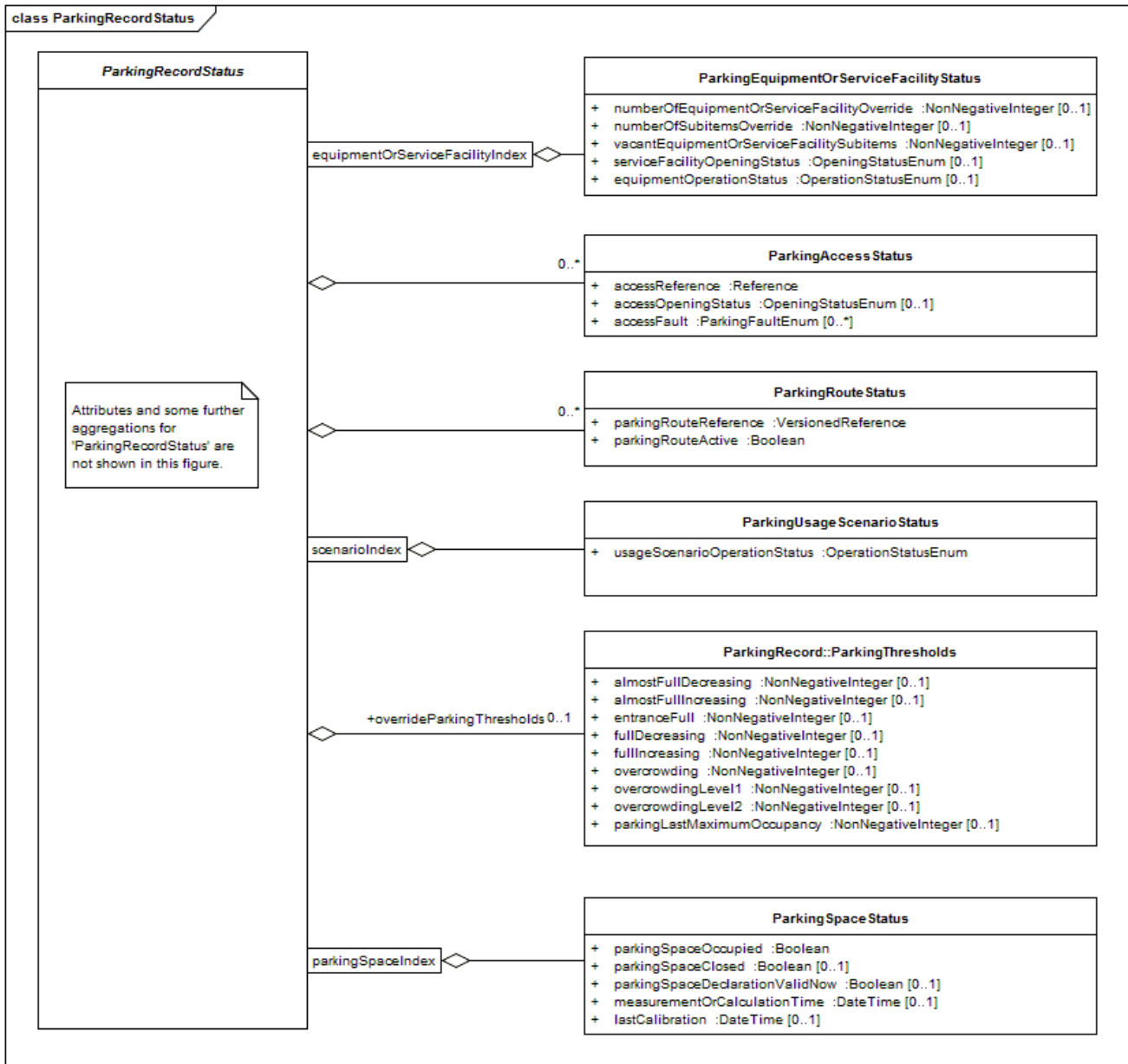


Figure 21 — The “ParkingRecordStatus” package class model (II)

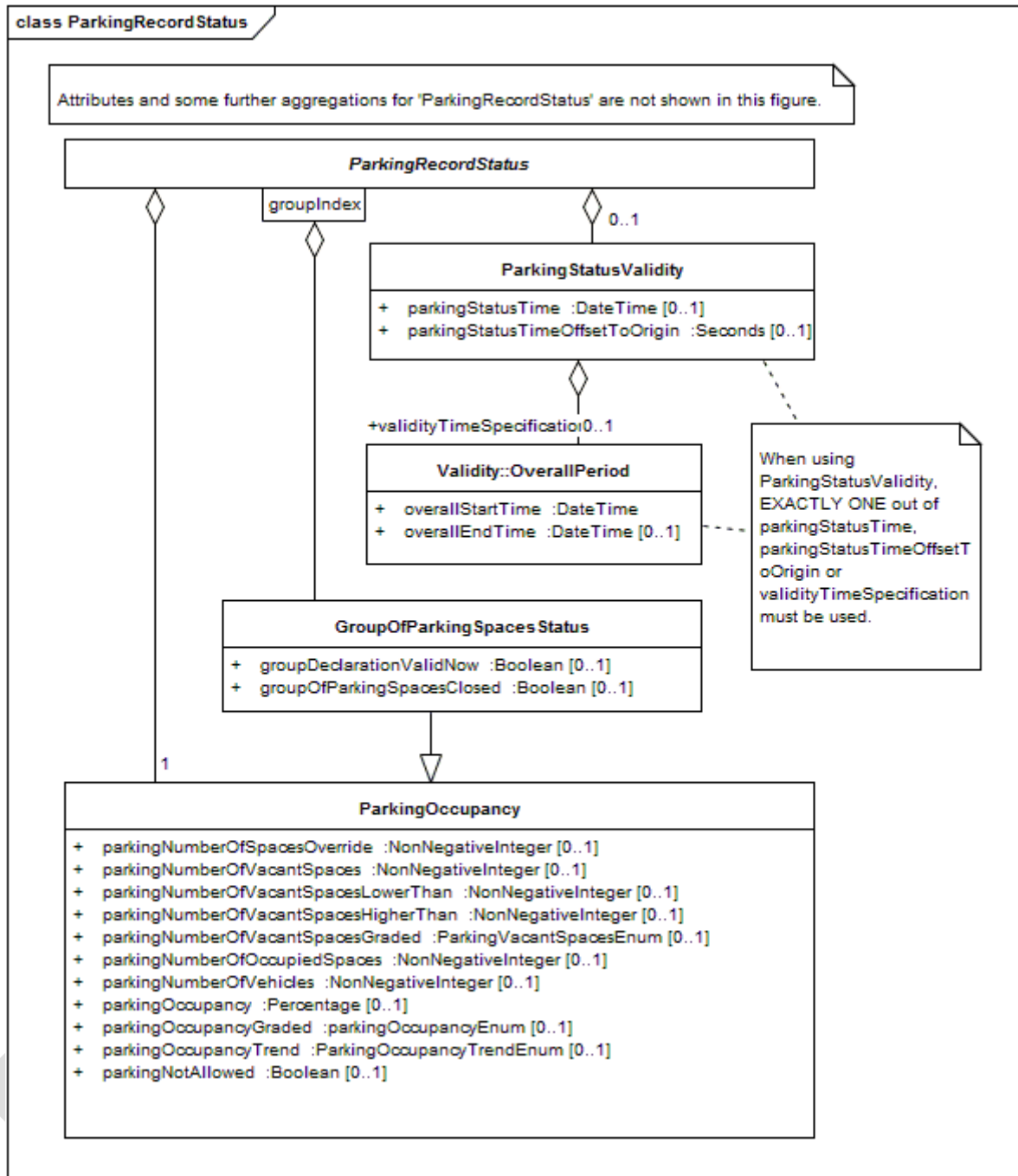


Figure 22 — The “ParkingRecordStatus” package class model (III)

### 9.3.2 Semantics of the “ParkingRecordStatus” package

#### 9.3.2.1 “ParkingRecordStatus” package semantics – general

The “ParkingRecordStatus” package contains status information for parking sites, groups of parking sites, parking spaces and groups of parking spaces. This covers occupancy information and status information about equipment and services. Vehicle rates and detector measurements may also be included.

### 9.3.2.2 “ParkingRecordStatus” Class

The “ParkingRecordStatus” class shall be abstract. It shall be specialised by using either the “GroupOfParkingSitesStatus” class or the “ParkingSiteStatus” class.

The “ParkingRecordStatus” class may provide status information about equipment and service facilities, parking routes, accesses and usage scenarios as well as status information about (groups of) parking spaces, all defined in the static part of the model. It shall contain an instance of the class “ParkingOccupancy” (occupation information for the parking itself).

Instances of the classes “ParkingEquipmentOrServiceFacilityStatus”, “ParkingSpaceStatus”, “GroupOfParkingSpacesStatus” and “ParkingUsageScenarioStatus” shall be indexed in order to reference the corresponding objects from the static Parking Publications model.

An instance of the “ParkingThresholds” class may be used with the role “overrideParkingThresholds” to overwrite values of this class from the static part of the Parking Publications model.

With the class “ParkingStatusValidity”, the dynamic parking information provided may be specified as historical or as forecasted data.

### 9.3.2.3 “ParkingSiteStatus” Class

An instance of this class shall provide information about the status of the parking site, such as being open or closed or if the parking site is full or not. Overcrowding information may also be specified in this class.

### 9.3.2.4 “GroupOfParkingSitesStatus” Class

An instance of this class shall provide information about the status of the group of parking spaces, i.e. if there are spaces available within this group or if all of the parking sites are full.

### 9.3.2.5 “ParkingEquipmentOrServiceFacilityStatus” Class

An instance of the “ParkingEquipmentOrServiceFacilityStatus” class may override the quantity values for equipment and/or service facilities of the static part of the model. It may include current availability information.

EXAMPLES The number of toilets can be temporary reduced to 5; The number of vacant restaurant seats can be set to 100.

The equipment or service facility in question is defined in the static part of the Parking Publications model in the class “ParkingEquipmentOrServiceFacility” (see Clause 8.9.2.2) and referenced by the “equipmentOrServiceFacilityIndex”.

### 9.3.2.6 “ParkingSpaceStatus” Class

Each instance of the “ParkingSpaceStatus” class may specify, if a dedicated parking space is currently occupied or not. Further details such as exact information time, information about closure or the last calibration of the detector may be added.

The parking space in question is defined in the static part of the Parking Publications model in the class “ParkingSpace” (see Clause 8.11.2.2) and referenced by the “parkingSpaceIndex”.

### 9.3.2.7 “ParkingOccupancy” Class

One instance of the “ParkingOccupancy” class shall be associated to the “ParkingRecordStatus” class and thus specify occupancy information for the parking record.

Furthermore, the class “GroupOfParkingSpaces” is a specialisation out of this class. In this case, the class “ParkingOccupancy” specifies occupancy information for the group of parking spaces (i.e. aggregated values for the group in question).



An instance of the “ParkingOccupancy” class may override the total number of spaces and may inform about free spaces and occupancy in different forms of expression. This covers numeric values like the number of free or occupied spaces (also: is lower or higher than) or the number of vehicles on the parking site as well as graded values (occupancy, occupancy trend, overcrowding).

Each instance of the “ParkingOccupancy” class may have an instance of the “VehicleCountAndRate” class associated (not visible in Figure 21; see Clause 9.4).

#### **9.3.2.8 “GroupOfParkingSpacesStatus” Class**

An instance of the “GroupOfParkingSpacesStatus” class shall be a specialisation of the “ParkingOccupancy” class and thus providing occupancy information for the group of parking spaces (i.e. aggregated values for the group). The group of parking spaces in question is defined in the static part of the Parking Publications model in the class “GroupOfParkingSpaces” (see Clause 8.11.2.3) and referenced by the “groupIndex”.

#### **9.3.2.9 “ParkingStatusValidity” Class**

With an instance of the class “ParkingStatusValidity”, the information time of the parking record status may be specified. This may be used for historical data (“parkingStatusTime” in the past) or for forecasted data (“parkingStatusTime” in the future).

If “ParkingStatusValidity” is used, exactly one out of “parkingStatusTime” (i.e. a fixed point of time), “parkingStatusTimeOffsetToOrigin” (i.e. a relative point of time) or “validityTimeSpecification” (i.e. all points of time within a given period scheme, for example every first Monday in month within summer) shall be used (for the last case, the “OverallPeriod” shall be used, which is defined in CEN/TS 16157-3).

If “ParkingStatusValidity” is not used, the “parkingStatusOriginTime” from class “ParkingRecordStatus” shall represent the time for the parking status information.

#### **9.3.2.10 “ParkingRouteStatus” Class**

An instance of the “ParkingRouteStatus” class shall specify, if the referenced parking route from the static part of the model is currently active or not.

#### **9.3.2.11 “ParkingUsageScenarioStatus” Class**

An instance of the “ParkingUsageScenarioStatus” class shall specify, if the referenced usage scenario from the static part of the model is currently in operation or not.

#### **9.3.2.12 “ParkingAccessStatus” Class**

An instance of the “ParkingAccessStatus” class shall specify, if the referenced access from the static part of the model is currently open or not or if there is a fault reported.

## 9.4 The “VehicleCountAndRate” package

### 9.4.1 Overview of the “VehicleCountAndRate” package

The “VehicleCountAndRate” package (see Figure 23) shall support provision of information about vehicle rates and occupancy changes within a given interval for a parking record.

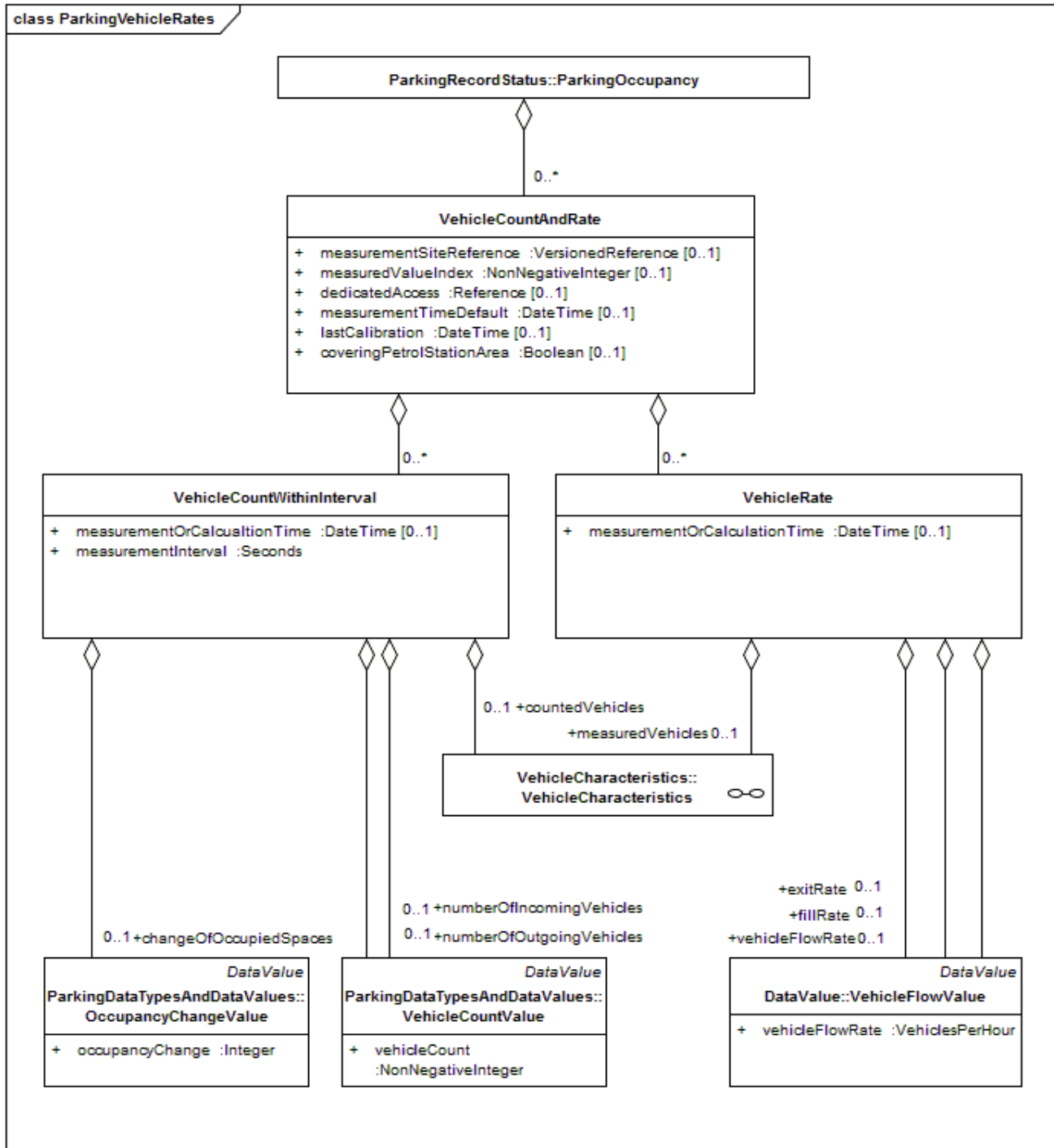


Figure 23 — The “VehicleCountAndRate” package class model

## 9.4.2 Semantics of the “VehicleCountAndRate” package

### 9.4.2.1 “VehicleCountAndRate” package semantics – general

The “VehicleCountAndRate” package may provide information about vehicle fill-, exit- or general flow rates using the class “VehicleRate”. This information may be linked with measurement sites defined by the Measurement Site Table Publication model in CEN-TS 16157-5.

Occupancy changes within a given interval may be specified using the class “VehicleCountWithinInterval”.

### 9.4.2.2 “VehicleCountAndRate” Class

An instance of the “VehicleCountAndRate” class may specify properties for one or more measured flow values. It may point to a defined measurement site (see above). It may also point to an specific access defined in the Parking Table model or may be marked as including petrol station traffic.

### 9.4.2.3 “VehicleCountWithinInterval” Class

An instance of the “VehicleCountWithinInterval” class may specify an interval (example: last 300 seconds with respect to “measurementOrCalculationTime”) and specify the incoming or outgoing vehicles or the change of occupancy within this interval. The information may be coupled to specific vehicle types by an instance of the class “VehicleCharacteristics”, defined in CEN/TS 16157-3.

### 9.4.2.4 “VehicleRate” Class

Each instance of the “VehicleRate” represents a vehicle flow rate value (fill rate, exit rate, or general flow rate) for the measurement site defined in class “VehicleCountAndRate”. The information may be coupled to specific vehicle types by an instance of the class “VehicleCharacteristics”, defined in CEN/TS 16157-3.

## 10 The Parking Vehicles Publication model

### 10.1 Overview of the Parking Vehicles Publication model

The Parking Vehicles Publication model comprises a number of packages, with the “ParkingVehiclesPublication” package providing the entry point to this third part of the Parking Publications model, which utilise some classes from the “ReusableClasses” package defined in CEN/TS 16157-3.

In this part of the model, it shall be possible to specify individual parked vehicles with their characteristics and specific parking related information.

The corresponding schema for the Parking Vehicles Publication model can be found in normative Annex H of this document.

### 10.2 The “ParkingVehiclesPublication” package

#### 10.2.1 Overview of the “ParkingVehiclesPublication” package

The “ParkingVehiclesPublication” package (see Figure 24) shall form a third publication in the context of the Parking Publications model.

The value of the “genericPublicationName” attribute shall be defined as “ParkingVehiclesPublication”.

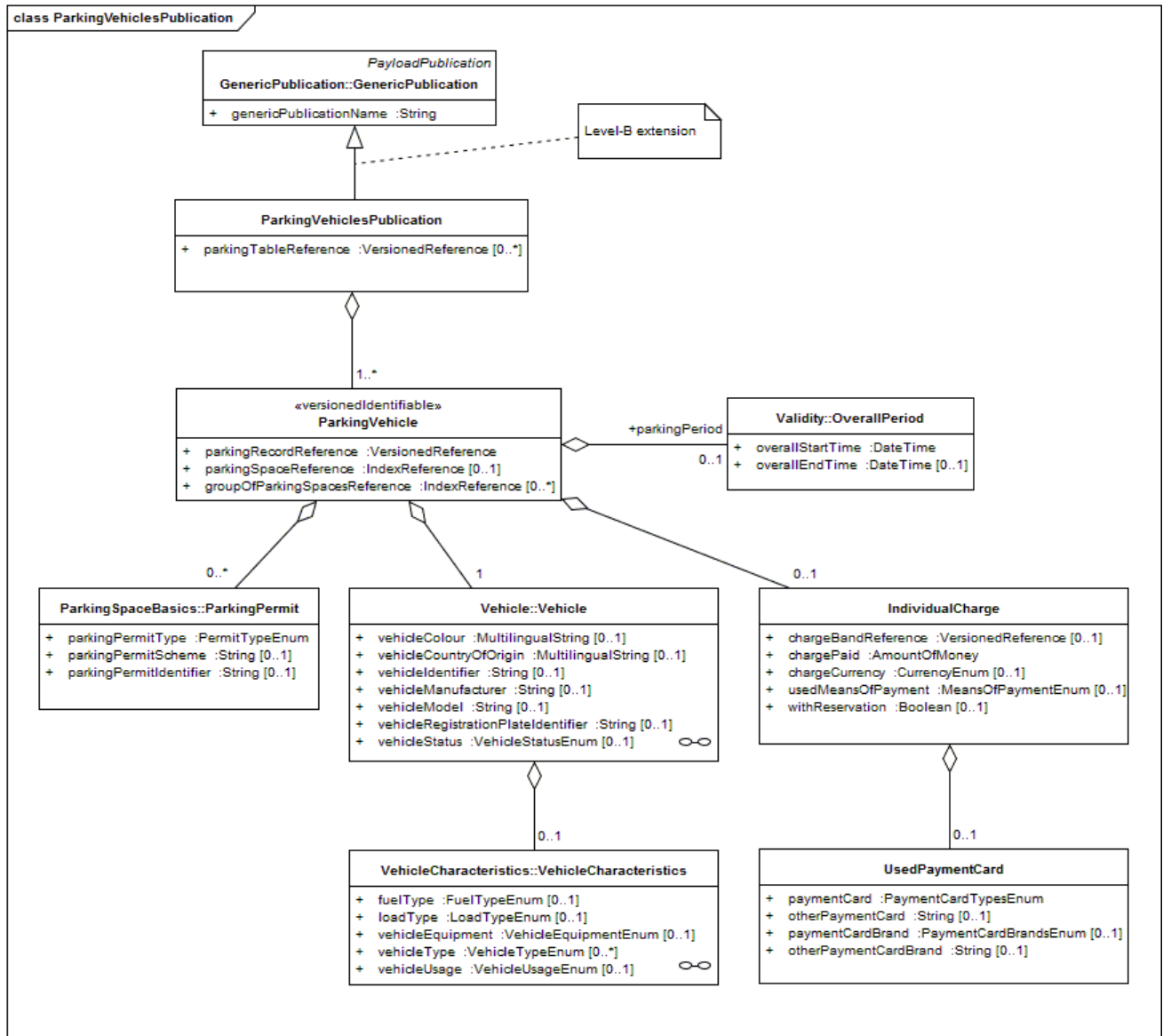


Figure 24 — The “ParkingVehiclesPublication” package class model

## 10.2.2 Semantics of the “ParkingVehiclesPublication” package

### 10.2.2.1 “ParkingVehiclesPublication” package semantics general

With this package, it shall be possible to specify individual parked vehicles with their characteristics and specific parking related information. For each specified vehicle, this may include the parking record, the parking space or corresponding group(s) of parking spaces, the parking permit, the type and other characteristics of the vehicle, the parking period as well as the individual charge for this vehicle including the used payment card.

#### 10.2.2.2 “ParkingVehiclesPublication” Class

The “ParkingVehiclesPublication” class is a specific realisable case of a “GenericPublication”. It shall be specified as a DTEX II “Level B extension”.

Each “ParkingVehiclesPublication” may reference to one or more instances of class “ParkingVehicle”.

The corresponding static parking table(s) may be referenced in this class.

### 10.2.2.3 “ParkingVehicle” Class

The “ParkingVehicle” class shall provide a reference to a static parking record, and it may provide references to one parking space and/or a number of corresponding groups of parking spaces (see class “ParkingRecord” in chapter 8.3.2.2, class “ParkingSpace” in chapter 8.11.2.2 and class “GroupOfParkingSpaces” in chapter 8.11.2.3).

The “ParkingVehicle” class shall provide information on an individual parked vehicle including its characteristics (class “Vehicle”, defined in CEN/TS 16157-3).

The “ParkingVehicle” class may provide information on the parking permit for the vehicle (class “ParkingPermit”, see chapter 8.12.2.5), about the parking period (class “Validity”, defined in CEN/TS 16157-3) and about the specific charge for this vehicle (class “IndividualCharge”, see next sub clauses)

### 10.2.2.4 “IndividualCharge” Class

The “IndividualCharge” class may provide information on the charge paid (or to be paid) for an individual parked vehicle. A reference to a charge band defined in the static part of the model may be provided (class “ChargeBand”, see chapter 8.10.2.4).

This information may include currency, amount, used means of payment or used payment card as well as a reservation statement.

### 10.2.2.5 “UsedPaymentCard” Class

The “UsedPaymentCard” class may provide information on the used payment card for parking the specific vehicle. This shall comprise the card type and may comprise its brand.

## Annex A (normative)

### DATEX II profile for Truck Parking

#### A.1 Overview

The Parking Publications model specified in Clauses 8 and 9 of this document is also capable of “Intelligent Truck Parking” (ITP) information, i.e. infrastructure and occupancy information for parking sites designed for and/or used (also) by lorries. Hence, a DATEX II profile for Truck Parking (based on the Parking Publications model) is specified in this annex (here within further also called “Truck Parking profile”).

The DATEX II profile for Truck parking specified in this annex is in compliance with the “COMMISSION DELEGATED REGULATION (EU) No 885/2013 of 15 May 2013 supplementing ITS Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles” [1] (here within further called “EU Truck Parking regulation” or “regulation”).

Annotations regard the EU Truck Parking regulation can be found in informative Annex B.

Further annotations on Truck Parking can be found in informative Annex C.

An overview on used classes can be found in informative Annex F.

The XML schema for the DATEX II profile for Truck Parking can be found in normative Annex I.

XML encoding examples can be found in informative Annex J.

**NOTE** Special attention to Clause A.2.3 is recommended, when developing a Truck Parking profile complaint system.

#### A.2 The DATEX II profile for Truck Parking

##### A.2.1 General rules

For the DATEX II profile for Truck Parking, the following rules shall apply:

- a) The DATEX II profile for Truck Parking shall be a valid DATEX II data model following the rules defined in CEN/TS 16157-1.
- b) The DATEX II profile for Truck Parking shall be equal to the Parking Publications model defined in Clause 8 (“static part of the Truck Parking profile”) and Clause 9 (“dynamic part of the Truck Parking profile”), limited by the following DATEX II complaint rules.

**NOTE** Thus, package “ParkingVehiclesPublication” is not part of the Truck Parking profile.

##### A.2.2 Schema modification rules

For the DATEX II profile for Truck Parking, the following modifications of the model shall apply, which are implemented in the corresponding schemata (see normative Annex I):

- a) The following attributes (which are optional in the Parking Publications model) shall not be part of the DATEX II profile for Truck Parking:
  - i) “emissionClassification” (from class “VehicleCharacteristicsExtended”)

- ii) "eventParkingType" and "eventParkingType2" (from class "ParkingUsageScenario")
  - iii) "fuelType2" (from class "VehicleCharacteristicsExtended")
  - iv) "operationFreeOfEmission" (from class "VehicleCharacteristicsExtended")
  - v) "vehicleUsage" and "vehicleUsage2" (from class "VehicleCharacteristics")
- b) The following enumerations shall be restricted to a smaller set of literals that can be seen in figure A.1:
- i) "AccessCategoryEnum" (see Table G.51 for original list of literals)
  - ii) "GroupOfParkingSitesTypeEnum" (see Table G.61 for original list of literals)
  - iii) "ParkingRouteTypeEnum" (see Table G.81 for original list of literals)
  - iv) "ParkingUsageScenarioEnum" (see Table G.90 for original list of literals)
  - v) "UserTypeEnum" (see Table G.105 for original list of literals)

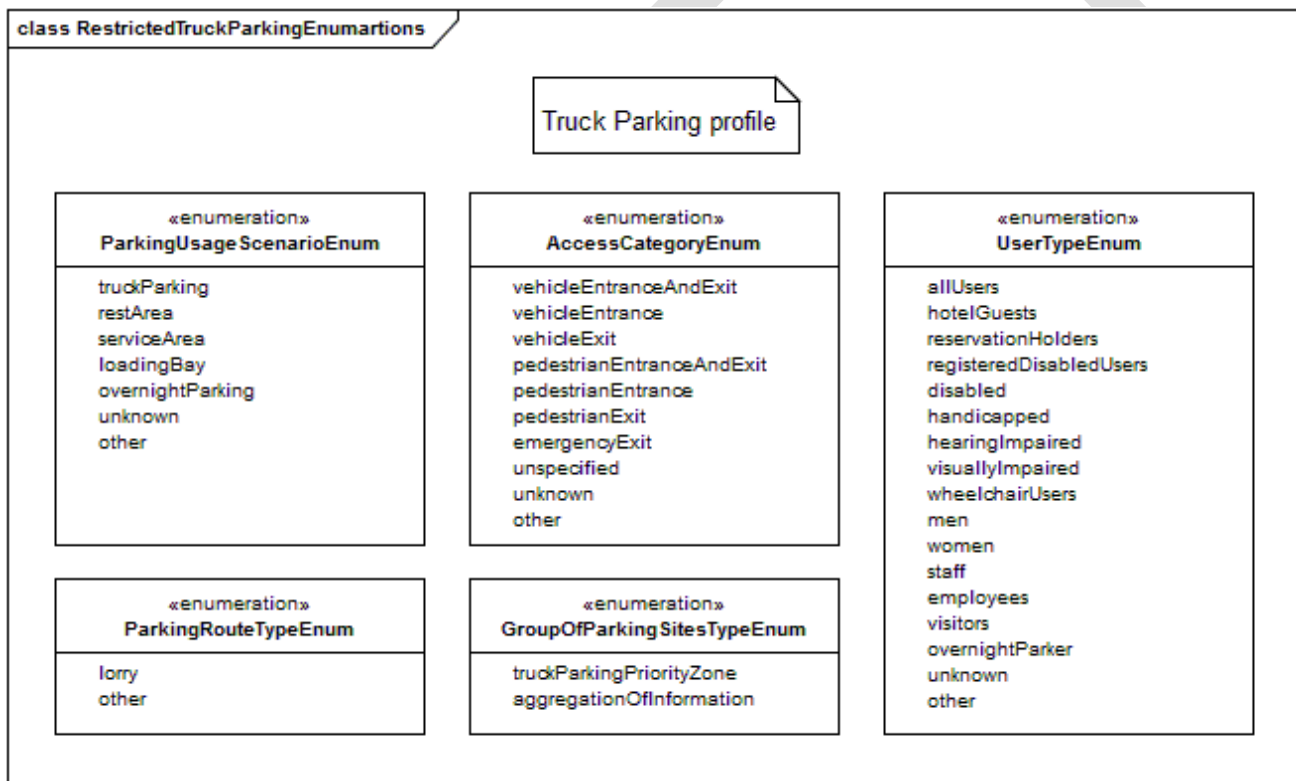


Figure A.1 — Restrictions in enumerations for the Truck Parking profile

- c) The following attributes, which are optional in the Parking Publications model, shall become mandatory (i.e. their multiplicity shall be set to 1, if not denoted otherwise):
- i) "parkingName" (in class "ParkingRecord")
  - ii) "roadIdentifier" (in class "Road")
  - iii) "roadDestination" (in class "Road"), new multiplicity: 1..\*



- iv) "parkingSecurity" (in class "ParkingStandardsAndSecurity"), new multiplicity: 1..\*
  - v) "parkingSiteStatus" (in class "ParkingSiteStatus")
  - vi) "parkingSiteOpeningStatus" (in class "ParkingSiteStatus")
- d) The following roles, which are optional in the Parking Publications model, shall become mandatory:
- i) "operator" (with target "ParkingRecord"), new multiplicity: 1..\*
  - ii) "parkingSiteAddress" (with target "ParkingSite"), new multiplicity: 1..\*
  - iii) "primaryRoad" (with target "ParkingAccess"), new multiplicity: 1..\*
- e) The following aggregations, which are optional in the Parking Publications model, shall become mandatory (i.e. their multiplicity shall be set to 1, if not denoted otherwise):
- i) "ParkingAccess" with target "ParkingSite", new multiplicity: 1..\*
  - ii) "ParkingStandardsAndSecurity" with target "ParkingSite"
  - iii) "Location" with target "ParkingAccess"

### A.2.3 Rules to check manually

For the DATEX II profile for Truck Parking, a number of rules shall apply that are not implemented in the schema (due to technical restrictions). Thus the following rules shall be checked carefully in resulting XML files manually:

- a) At least one instance of "ParkingUsageScenario" shall be used with "parkingUsageScenario" = "truckParking"
- b) For the instance of the role "parkingSiteAddress" (from class "ParkingSite"), exactly one of the following two options shall be used in the specialisation class "ContactDetails":
  - i) using the attribute "contactDetailsAddress" or
  - ii) using all of the following attributes: "contactDetailsStreet", "contactDetailsHouseNumber", "contactDetailsPostcode", "contactDetailsCity", "country".

**NOTE** It is allowed to use the specialisation "ContactByReference" instead, in case this rule is fulfilled for the referenced contact.

- c) For at least one instance of the role "operator" (with target "ParkingRecord"), the following attributes shall be used in the specialisation class "ContactDetails":
  - i) "contactPersonName"
  - ii) "contactPersonFirstName"
  - iii) "contactPersonTelephoneNumber"
  - iv) "contactPersonEMail"
  - v) "publishingAgreement"

**NOTE** It is allowed to use the specialisation "ContactByReference" instead, in case this rule is fulfilled for the referenced contact.

- d) 'Number of free spaces for lorries':

At least one of the two following sub-Clauses shall be fulfilled:

- i) using an instance of one of the roles “onlyAssignedParking” or “assignedParkingAmongOthers” (with target “ParkingRecord”) with “VehicleCharacteristics” – “vehicleType” = “lorry” and using the attribute “parkingNumberOfVacantSpaces” from class “ParkingOccupancy” in the corresponding dynamic message.
- ii) defining a group of parking spaces (class “GroupOfParkingSpaces”) and applying i) in an appropriate manner for this group of parking spaces (instead for the entire parking site). The same “groupIndex” shall be used in the static and in the dynamic publication to reveal the relationship.

e) ‘Total number of special parking spaces for refrigerated good vehicles’:

At least one instance of “GroupOfParkingSpaces” shall be mandatory for a “ParkingSite”. This “GroupOfParkingSpaces” instance must use an instance of one of the roles “onlyAssignedParking” or “assignedParkingAmongOthers” (with target “ParkingSpaceBasics”) with “VehicleCharacteristicsExtended” – “loadType2” = “refrigeratedGoods” and using the attribute “parkingNumberOfSpaces” from class “GroupOfParkingSpaces”.

NOTE: As a recommendation, the “parkingTypeOfGroup” may be set to “statisticsOnly”, especially, if the number of parking spaces for refrigerated good vehicles is zero.

- f) For at least one instance of “ParkingAccess”, the mandatory “Location” shall be of type “Point” and shall comprise the “PointByCoordinates” structure.
- g) Exactly one instance of “TariffsAndPayment” (aggregation with target “ParkingRecord”) shall be mandatory when specifying a parking site.

NOTE This rule is not implemented in the model, because otherwise it would force a tariffs section for groups of parking sites, too.

- h) For the instance of class “TariffsAndPayment” with target “ParkingRecord” (see also sub-Clause before), either the attribute “freeOfCharge” = “true” or at least one instance of the class “ChargeBand” shall be used.
- i) The attribute “parkingNumberOfVacantSpaces” (class “ParkingOccupancy”) shall be used for the instance with target “ParkingRecordStatus”.

## Annex B (informative)

### Compliance of the DATEX II Truck Parking profile with the EU Truck Parking regulation

#### B.1 Overview

The DATEX II profile for Truck Parking specified in Annex A is in compliance with the “COMMISSION DELEGATED REGULATION (EU) No 885/2013 of 15 May 2013 supplementing ITS Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of information services for safe and secure parking places for trucks and commercial vehicles” [1] (here within further called “EU Truck Parking regulation” or “regulation”).

This Clause shows a mapping from the EU Truck Parking regulation to the DATEX II profile for Truck Parking and gives hints for modelling.

The XML example on the Truck Parking profile in informative Annex J is in compliance with the EU Truck Parking regulation.

##### B.1.1 Annotations to the mapping

A “parking area” in the sense of the EU Truck Parking regulation corresponds to a “(Truck) Parking site” in the sense of the Truck Parking profile.

In the DATEX II profile for Truck Parking, it is not intended to limit the number of characters for attributes (despite for the datatype String, which is limited to 1024 characters).

In the following Clauses, the first sub-Clause shows the EU Truck Parking regulation with numbered sub-sub-Clauses. In the second sub-Clause, the DATEX II representation is denoted, using the same numbering scheme.

#### B.2 Static data related to the parking areas

##### B.2.1 EU Truck Parking regulation

Static data related to the parking areas, including (where applicable)

1. Identification information of parking area (name and address of the truck parking area (limited to 200 characters))
2. Location information of the entry point in the parking area (latitude/longitude) (20 + 20 characters)
3. Primary road identifier1/direction (20 characters/20 characters), and Primary road identifier2/direction (20 characters/20 characters) if same parking accessible from two different roads
4. If needed, the indication of the Exit to be taken (limited to 100 characters)/Distance from primary road (integer 3) km or miles
5. Total number of free parking places for trucks (integer 3)
6. Price and currency of parking places (300 characters)

## B.2.2 Representation in DATEX II profile for Truck Parking

1. In the Truck Parking profile, the following attributes from class "ParkingSite" resp. "ParkingRecord" shall be used:
  - "parkingName" [MultilingualString] (i.e. multiple Strings in different languages possible)
  - "parkingAlias", if applicable [MultilingualString]
  - "parkingSiteAddress" – with "contactDetailsAddress", "contactDetailsStreet", "contactDetailsHouseNumber", "contactDetailsPostcode", "contactDetailsCity" [Strings] (i.e. the address can be either given as a single String or be split into its components).

NOTE It is allowed to use the specialisation "ContactByReference" instead, in case the corresponding rule A.2.3 b) is fulfilled in the referenced contact.

2. The standardised DATEX II georeference mechanisms are used. For at least one access, a point must be specified by its ETRS89 coordinates (class "PointCoordinates", attributes "latitude" and "longitude" [Float])
3. For a parking site, at least one entrance/exit shall be defined (class "ParkingAccess"). For every entrance/exit at least one primary road shall be defined with the following parameters (class "Road"):
  - "roadName" [0..1], [MultilingualString]
  - "roadIdentifier" [1], [MultilingualString]
  - "roadDestination" [1..\*], [MultilingualString] (= direction)
  - "distanceToThisRoad" [0..1], [Metres]
4. The "Road" class mentioned above may be specialised as a "RoadNode" which supports a "junctionName" [MultilingualString]. The motorway and the distance between the parking site and the junction can be specified as described in sub-Clause 3.
5. In the dynamic part of the Truck Parking profile, there is an attribute "parkingNumberOfVacantSpaces" (class "ParkingOccupancy") [NonNegativeInteger]. It can be used for the parking site itself or for defined groups of parking spaces. It is recommended to define a group of spaces with "onlyAssignedParking" - "vehicleType" = "lorry" in the static part of the model to specify the desired information.
6. Several instances of "ChargeBand" with multiple instances of "Charge" can be defined for a parking site. Each charge band may be restricted to complex periods, also to special days, for example to Saturdays and Sundays. The charge band does also have a mandatory "chargeCurrency" [enumeration according to ISO 4217 [6] for the currency in which the parking charge is specified (e.g. EUR, GBP, SEK, CZK)]. Each charge may be defined for a "chargeInterval" [Seconds] and/or for periods (e.g. from 12 PM to 8 PM). The charge value itself can be specified with attribute "charge" [Decimal].

It is allowed to set the attribute "freeOfCharge" = "true" (class "TariffsAndPayment") instead, meaning that there is no price to pay for parking.

## B.3 Information on safety and equipment of the parking area

### B.3.1 EU Truck Parking regulation

Information on safety and equipment of the parking area

1. Description of security, safety and service equipment of the parking including national classification if one is applied (500 characters)
2. Number of parking places for refrigerated goods vehicles (numerical 4 digits)
3. Information on specific equipment or services for specific goods vehicles and other (300 characters)
4. Contact information of the parking operator:
  - Name and surname (up to 100 characters)
  - Telephone number (up to 20 characters)
  - E-mail address (up to 50 characters)
  - Consent of the operator to make his contact information public (Yes/No)

### B.3.2 Representation in DATEX II profile for Truck Parking

1. The following attributes are provided in class "ParkingStandardsAndSecurity" of the Truck parking profile:
  - "parkingSecurity" [Enumeration, values see figure below]. This attribute is mandatory in the Truck Parking profile. Use 'none', if there are no security measures. Use 'other', if none of the values applies and use "parkingAdditionalSecurity" [MultilingualString] in this case. It is also possible to use "parkingAdditionalSecurity" in addition to literals from "parkingSecurityEnum".
  - "parkingSecurityNationalClassification" [MultilingualString] – this shall be used, if it applies. Furthermore, a certified secure parking [Boolean] may be indicated and a date of certification may be provided.

Furthermore, the following attributes are available:

- "labelSecurityLevel" [security level 1 to 5 or "none" or "unknown"]
- "labelServiceLevel" [service level 1 to 5 or "none" or "unknown"]
- "labelSecurityLevelSelfAssessment" [security level 1 to 5 or "none" or "unknown"]
- "labelServiceLevelSelfAssessment" [service level 1 to 5 or "none" or "unknown"]
- "parkingSupervision" [Enumeration, values see Figure B.1]
- "certifiedSecureParking" [Boolean]
- "dateOfCertification" [Date]

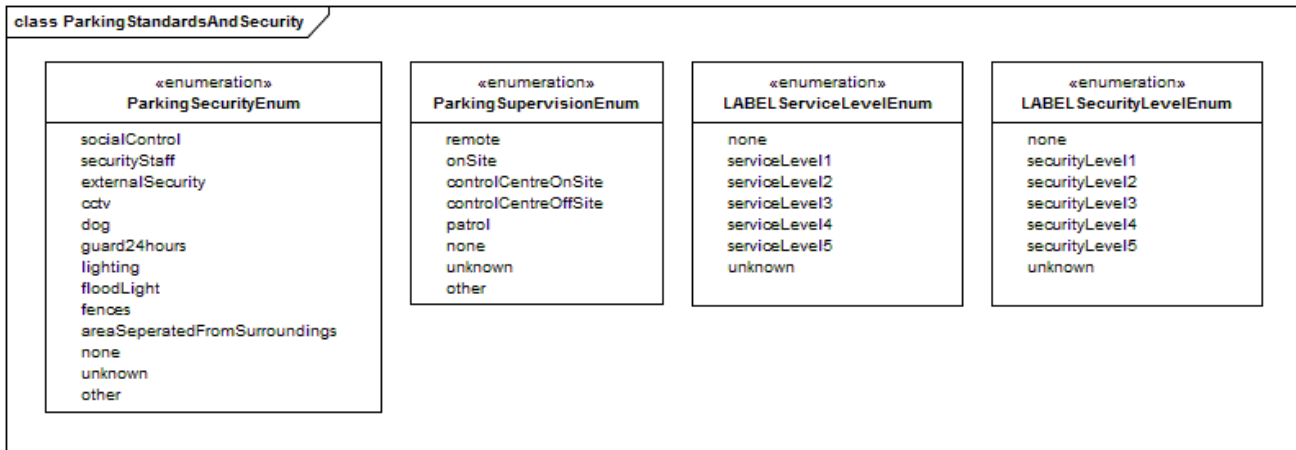


Figure B.1 — Enumerations for “StandardsAndSecurity”

Furthermore, other equipment or service facilities may be defined with the class “ParkingEquipmentOrServiceFacility”.

2. It is mandatory to define at least one group of parking spaces for vehicles with load type “refrigeratedGoods” and to provide the number of parking spaces for this group.
3. The class “ParkingEquipmentOrServiceFacility” provides up to 60 different types of equipment or service facilities, which may be described with their number, location, opening times or tariffs or vehicle restrictions. Examples are electric charging stations, ice-free-scaffolds, toilets, restaurants or truck wash services. Using the attribute “otherEquipmentOrServiceFacility” [MultilingualString], custom elements may be provided in case the enumeration values do not fit. Every element may be specified for the parking site itself or belonging to a dedicated group of parking spaces.

For every type of equipment or service facility, an own instance of “ParkingEquipmentOrServiceFacility” has to be used. If there is no equipment or service existent, do not create any instance of “ParkingEquipmentOrServiceFacility”.

If the type of equipment or service facility is designed for 'specific goods vehicles', the “applicableForVehicles” role may be used to specify them.

When using the equipment “electricChargingStation”, an instance of class “ElectricCharging” may enhance information.

4. For at least one operator (role “operator” from class “ParkingRecord”) the following attributes (from class “ContactDetails”) must be used: “contactPersonName”, “contactPersonFirstName”, “ContactDetails TelephoneNumber”, “contactDetailsEMail” [all String] and “publishingAgreement” [Boolean].

NOTE It is allowed to use the specialisation “ContactByReference” instead, in case the corresponding rule A.2.3.c) is fulfilled for the referenced contact.

## B.4 Dynamic data

### B.4.1 EU Truck Parking regulation

Dynamic data on availability of parking places including whether a parking is: full, closed or number of free places that are available.

### B.4.2 Representation in DATEX II profile for Truck Parking

The parking states shown in Figure B.2 are available in the dynamic part of the Truck Parking profile (class "ParkingSiteStatus").

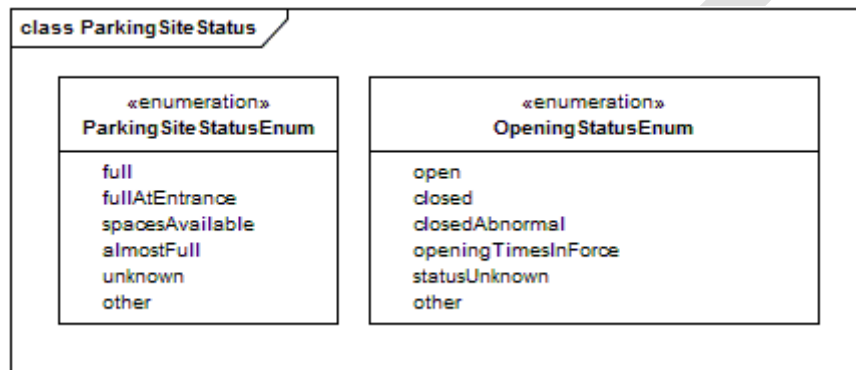


Figure B.2 — "ParkingStatusEnum"

For a status that is not included in the enumeration "ParkingSiteStatusEnum", "parkingStatusDescription" [MultilingualString] (in class "ParkingRecordStatus") can be used instead.

In the dynamic part of the Truck Parking profile, there is an attribute "parkingNumberOfVacantSpaces" (class "ParkingOccupancy") [NonNegativeInteger]. It can be specified for the parking site itself or for defined groups of parking spaces.

## B.5 Truck Parking Priority Zone

There are two possibilities to indicate a Truck Parking Priority Zone according to the EU Truck Parking regulation:

- Creating a group of parking sites (class "GroupOfParkingSites") and using the attribute "groupOfParkingSitesType" = "truckParkingPriorityZone"
- Using the role "entireArea" of class "ParkingRecord" to define a georeference for a Truck Parking Priority Zone. Use the "areaName" attribute in "NamedArea" to specify details.

See also Figure B.4 on this topic.

## B.6 DATEX II representation of the EU Truck Parking regulation in figures

This Clause shows the DATEX II elements described above in form of figures (Figure B.3 up to Figure B.10). Please note that the DATEX II Truck Parking profile is more extensive, i.e. in these figures, not all elements and aggregations available in the DATEX II Truck Parking profile are shown. Thus, an XML is not restricted to the elements shown in these figures to be compliant to the EU Truck Parking regulation.

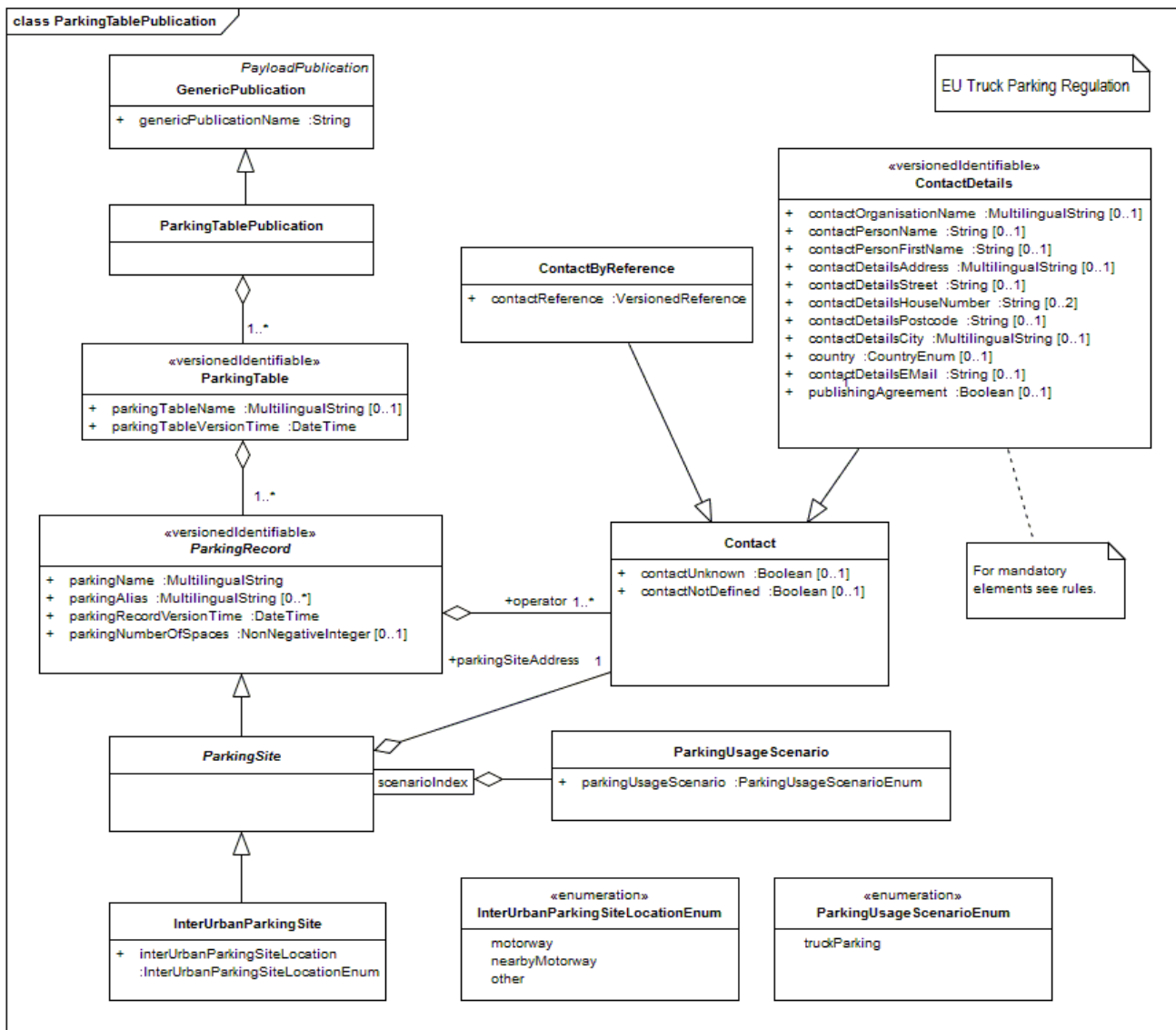


Figure B.3 —"ParkingTablePublication" (EU Truck Parking regulation)



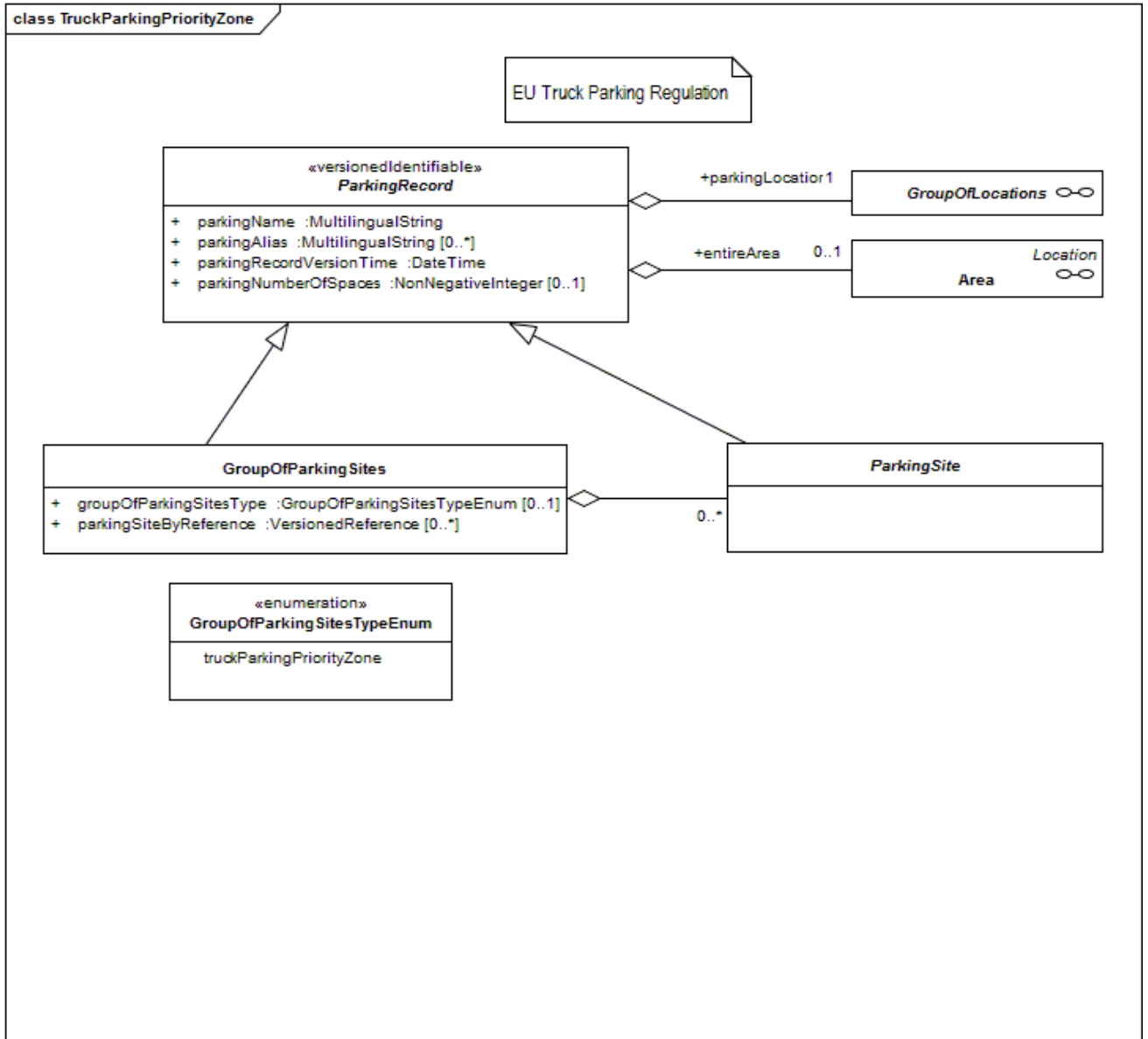


Figure B.4 — Truck Parking Priority Zone (EU Truck Parking regulation)

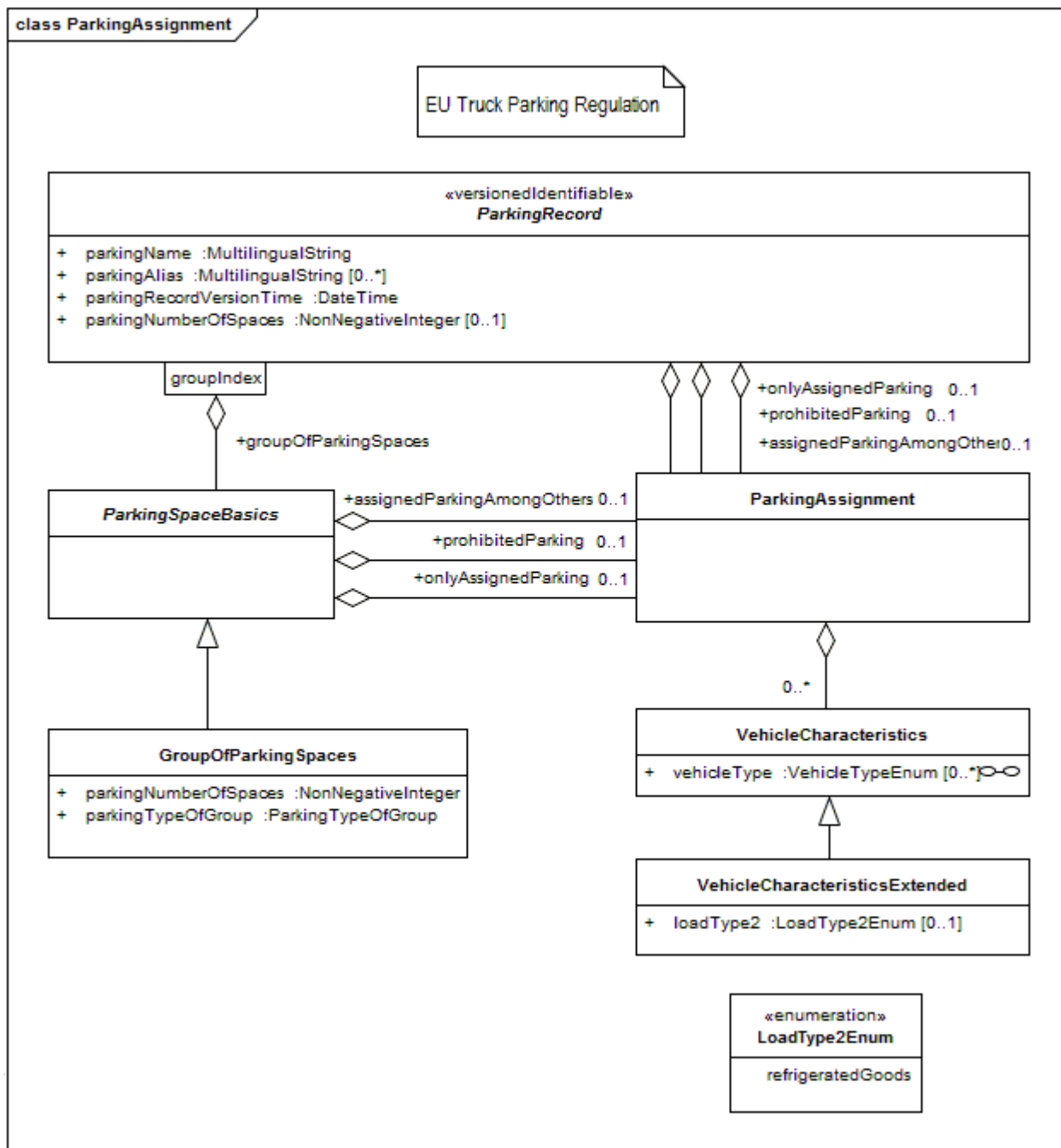


Figure B.5 —"ParkingAssignment" (EU Truck Parking regulation)

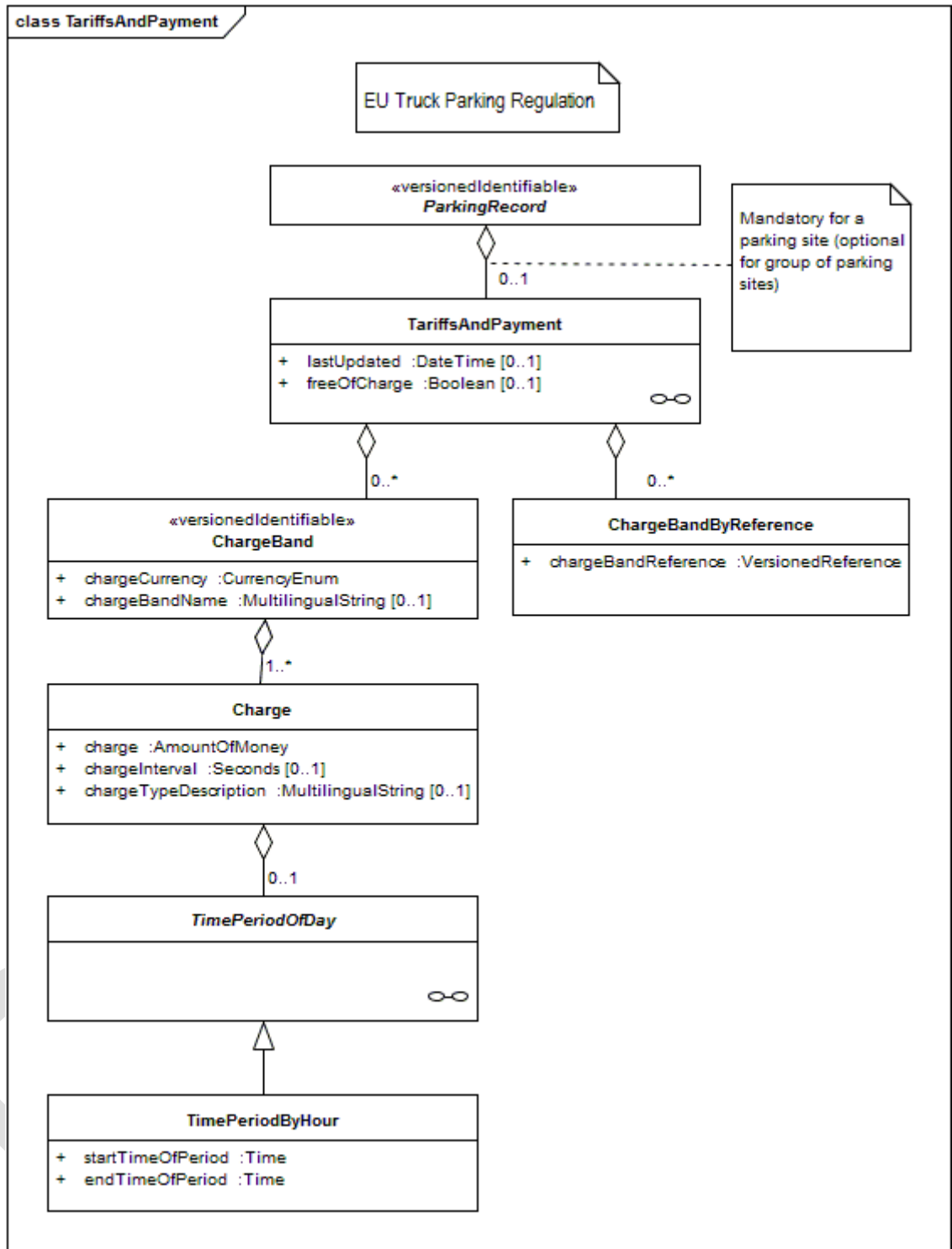


Figure B.6 —"TariffsAndPayment" (EU Truck Parking regulation)

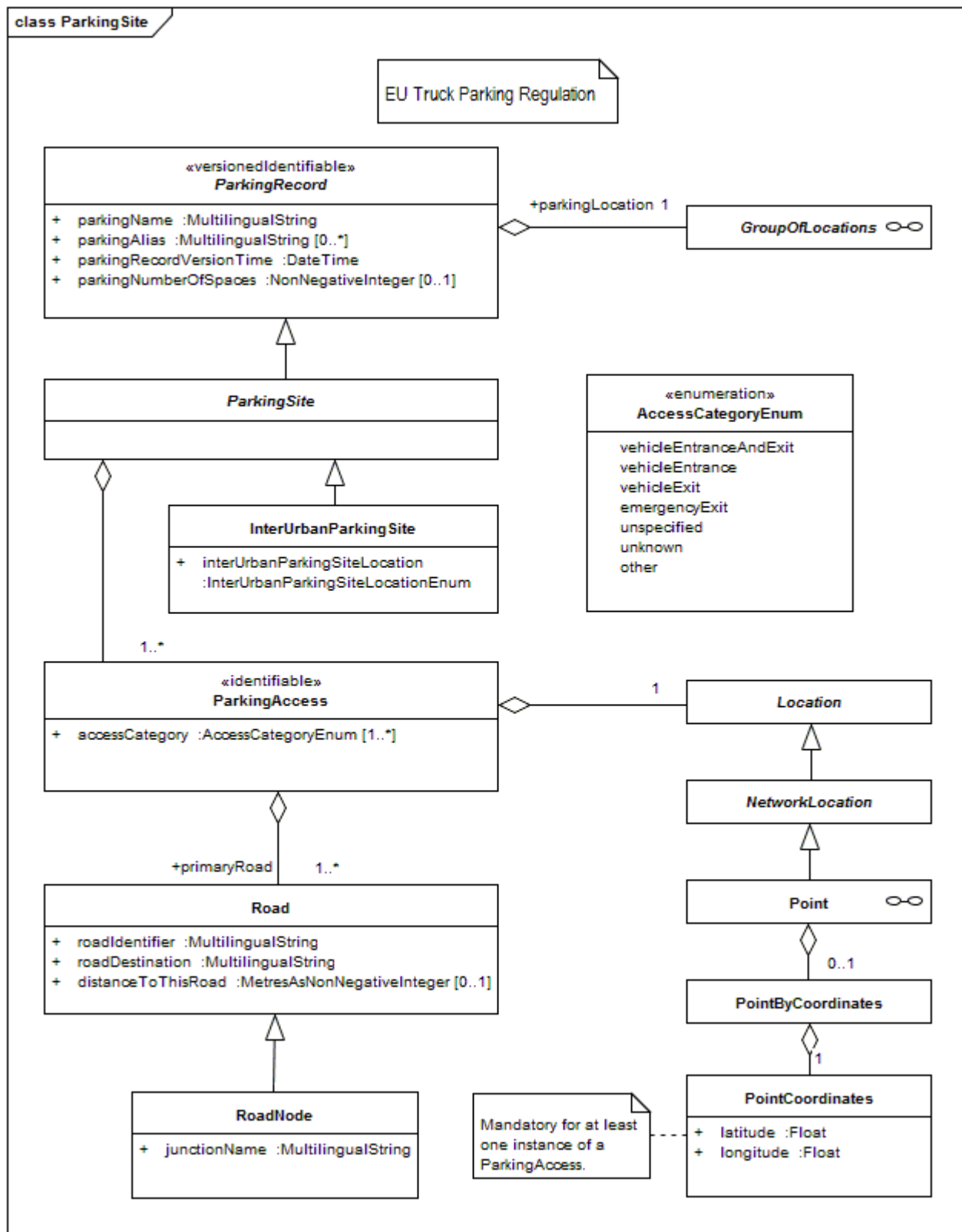


Figure B.7 —“ParkingSite” (EU Truck Parking regulation)

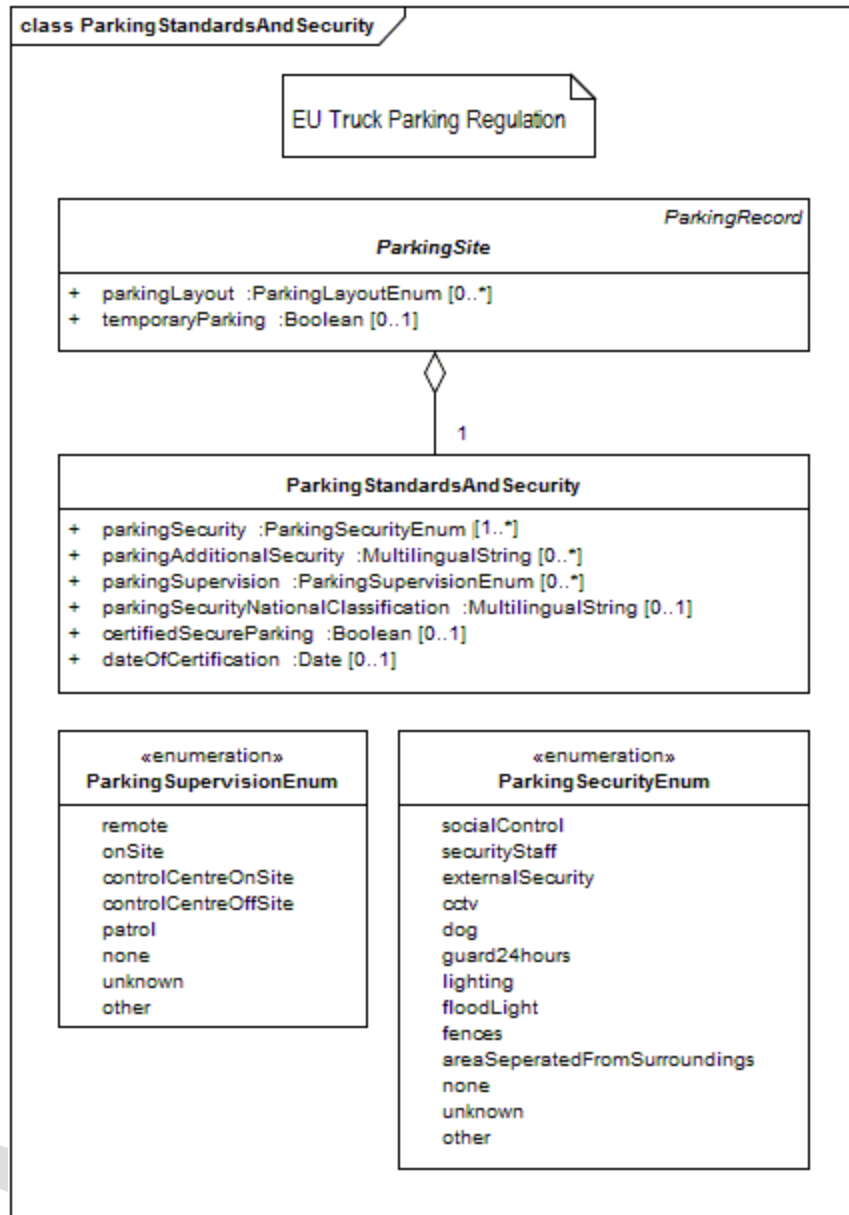


Figure B.8 — "ParkingStandardsAndSecurity" (EU Truck Parking regulation)

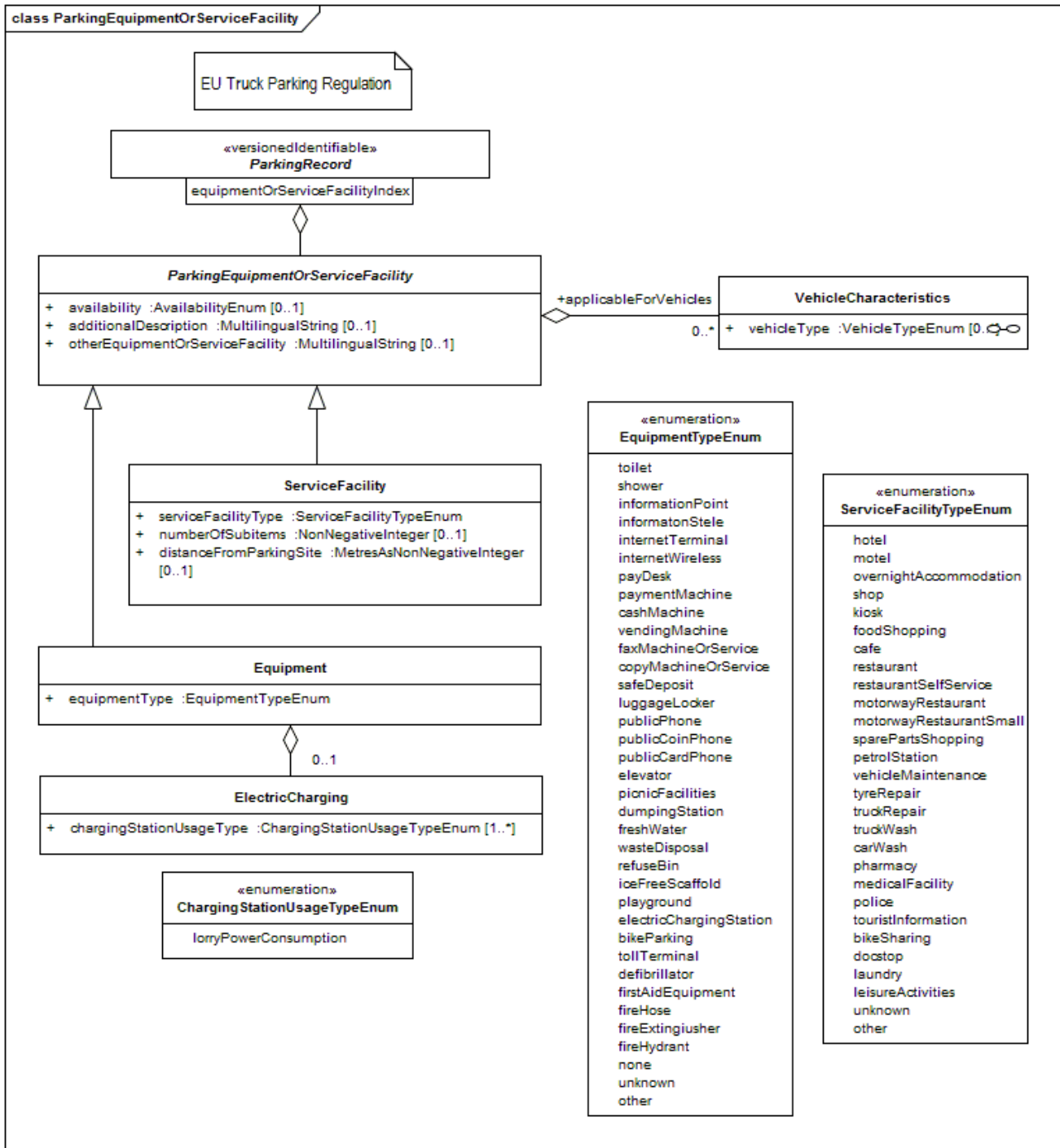


Figure B.9 — "ParkingEquipmentOrServiceFacility" (EU Truck Parking regulation)

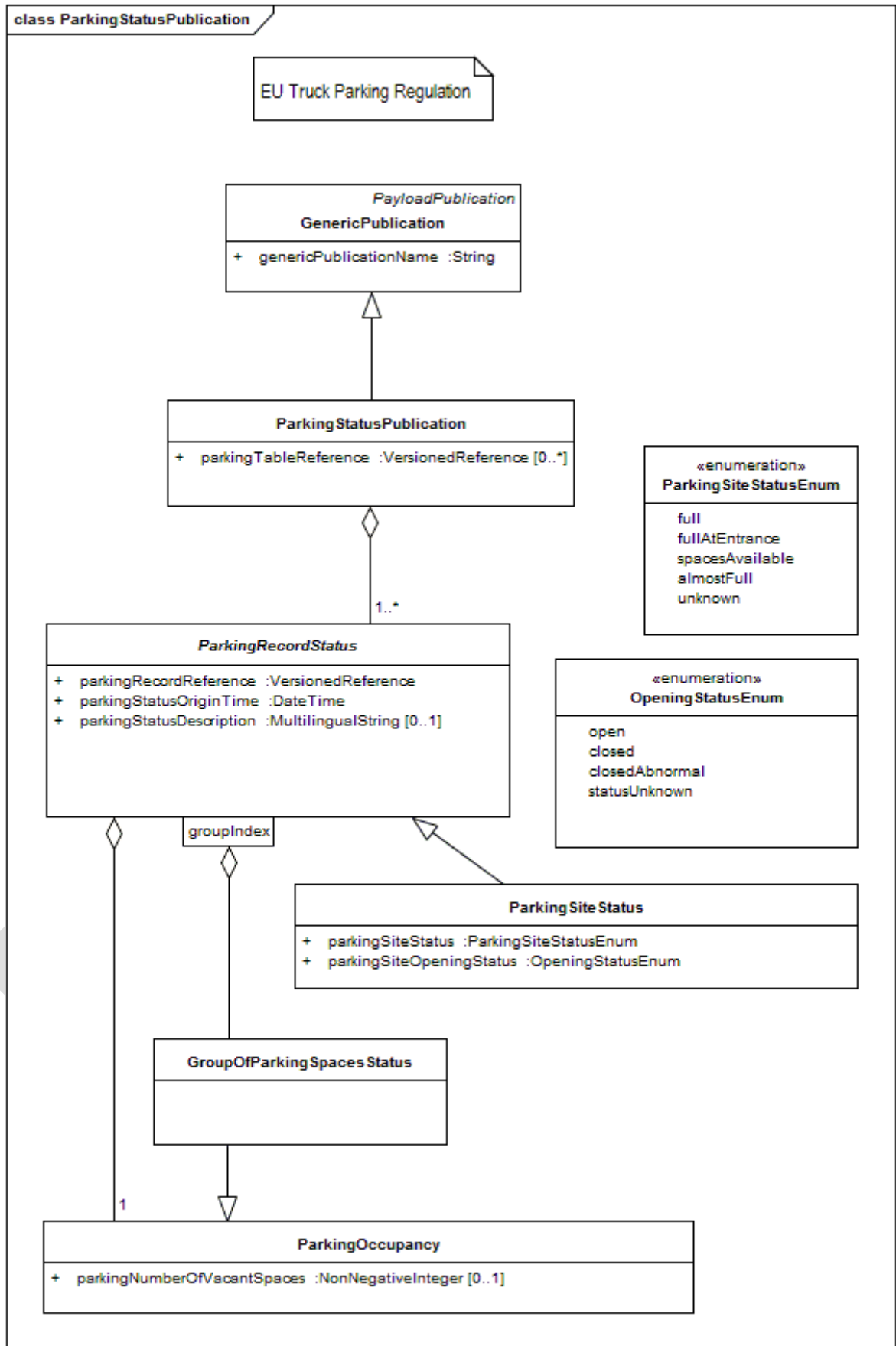


Figure B.10 — "ParkingStatusPublication" (EU Truck Parking regulation)

## Annex C (informative)

### Additional explanation on the DATEX II profile for Truck Parking

#### C.1 Additional explanation on the DATEX II profile for Truck Parking

##### C.1.1 Overview

###### Naming convention:

DATEX II is based upon British English, so the term “lorry” is used instead of “truck” within written text. Nevertheless, as the term “Truck Parking” is quite common, it is still used for the model itself (“Data model for Truck Parking” or “Truck Parking Publications model”). This implies the meaning and needs of “Intelligent Truck Parking” (ITP), although this term is not used here any further.

This informative Annex gives additional information to the DATEX II profile for Truck Parking specified in Annex A.

In this Clause, the header “Differences” will point out differences between the Parking Publications model defined in Clauses 8 and 9 and the Truck Parking Profile defined in normative Annex A.

NOTE Not all elements of the Truck Parking Profile are shown in the figures within this Clause.

##### C.1.2 The “ParkingTablePublication” package for the Truck Parking profile

Like the Parking Publications model, the Truck Parking Publications model supports urban, interurban and special location parking sites – further called “Truck Parking sites” – as well as groups of parking sites.

For a Truck Parking site, the usage scenario “truckParking” must be defined in the “ParkingUsageScenario” class. Truck Parking sites are usually located alongside or nearby a motorway and used for Truck Parking (further vehicle types might be allowed to park there, too). Truck Parkings might be associated with a rest- and/or service area (which must be specified in form of usage scenarios). A petrol station might be associated - use “ParkingEquipmentOrServiceFacility” for that purpose.

With a group of parking sites, it is possible, for example, to define all Truck Parking sites along a specific motorway (thus it is possible to specify the free number of Truck Parking spaces along that motorway, for example).

It is not necessary to use both elements, i.e. parking sites and groups of parking sites. It is possible to focus on one of them. A Truck Parking site must not necessarily belong to a group of parking sites.

Figure C.1 shows the basic structure of the Truck Parking profile:



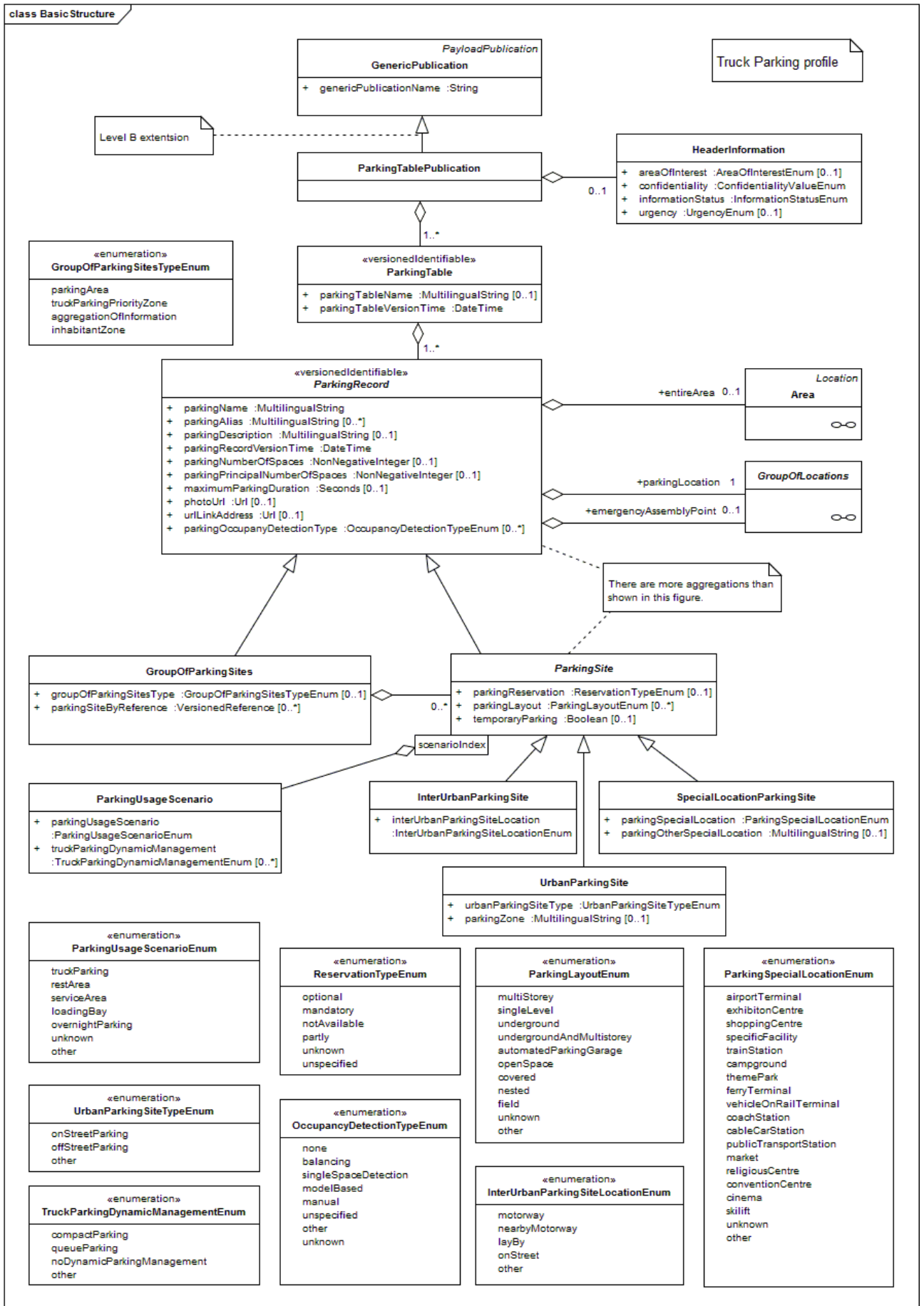


Figure C.1 — Basic structure of the Truck Parking profile

### C.1.3 The “ParkingRecord” package for the Truck Parking profile

#### Differences:

- The attribute “parkingName” became mandatory to get compliance with the EU Truck Parking regulation.
- The role “operator” became mandatory (i.e. multiplicity 1..\*) to get compliance with the EU Truck Parking regulation. For at least one operator, several contact attributes get mandatory (see A.2.3.c).
- The “TariffsAndPayment” class became mandatory for a parking site (this cannot be restricted by the schema) (not visible in the figure above)
- The number of free spaces for lorries and the number of places for refrigerated goods need to be specified – either for the whole parking site or for a group of parking spaces – see A.2.3.d) and A.2.3.e) for details.

Like the Parking Publications model, the Truck Parking Publications model covers the following themes for a “ParkingRecord”:

- Parking assignments (only assigned, assigned among others, prohibited)
- Tariffs and payment
- Parking spaces and groups of parking spaces
- Thresholds
- Permits and prohibitions
- Contact details for
  - Responsible Authority
  - Owner
  - Operator
  - Emergency issues
  - Security service
  - Service partner
  - VMS Operator
  - Reservation service (for a parking site)
  - Parking site address (for a parking site)
- VMS Reference
- Parking Routes
- Emergency Assembly Point (Georeference)
- Parking Location (Georeference for the parking site or group of parking sites)
- Entire Area (Georeference for a corresponding area)

### C.1.4 The “ParkingSite” package for the Truck Parking profile

#### Differences:

- The role “parkingSiteAddress” became mandatory to get compliance with the EU Truck Parking regulation. Using this role, the address of the parking has to be specified either in form of one single multi lingual string or in form of several address literals.
- The “ParkingAccess” class became mandatory (i.e. multiplicity: 1..\*) to get compliance with the EU Truck Parking regulation.
- The “ParkingStandardsAndSecurity” class became mandatory to get compliance with the EU Truck Parking regulation.
- In “ParkingUsageScenario”, the attributes “eventParkingType” and “eventParkingType2” have been omitted. The literals of “ParkingUsageScenarioEnum” have been restricted according to Figure A.1.

#### Hints to classify a Truck Parking site:

- Use a “UsageScenario” with “usageScenarioType” = “truckParking”. If applicable, you can use the usage scenarios “restArea” and/or “serviceArea” in addition.
- Use “assignedParkingAmongOthers” (class “ParkingSite”) with “VehicleCharacteristics”, “vehicleType” = “lorry”. If no other vehicles than lorries are allowed, use “onlyAssignedParking” [...] instead.
- If the Truck Parking is located directly on a motorway or a similar type of road, use an “InterUrbanParkingSite” with “interurbanParkingSiteLocation” = “motorway”.
- If the Truck Parking is located with some distance to a motorway or a similar type of road but focussed on travellers from this motorway, use an “InterUrbanParkingSite” with “interUrbanParkingSiteLocation” = “nearbyMotorway”
- If the Truck Parking is located along a roadside, use an “InterUrbanParkingSite” with “interUrbanParkingSiteLocation” = “layBy”
- As “interUrbanParkingSiteLocation” is mandatory, use “other” in case the three literals above do not fit.
- Additional equipment and infrastructure, like petrol stations, toilets, restaurants and many more can be specified using the class “ParkingEquipmentOrServiceFacility”. These elements can be simply announced to exist or not to exist on the parking site or explicit declared with their number (e.g. 5 toilets, 100 places in restaurants etc.). See “ParkingEquipmentOrServiceFacility” (Clause C.1.9) for further details.
- For a description of the “truckParkingDynamicManagement” types see Clause C.1.12.

Like the Parking Publications model, the Truck Parking profile covers the following themes for a “ParkingSite”:

- Standards and security
- Parking accesses
- Opening times
- Address details for parking site itself and contact details for reservation service
- Usage Scenarios (limited)

### C.1.5 The “PolygonArea” package for the Truck Parking profile

There are no differences for the “PolygonArea” package between the Truck Parking profile and the Parking Publications model.

### C.1.6 The “OpeningTimes” package for the Truck Parking profile

There are no differences for the “OpeningTimes” package between the Truck Parking profile and the Parking Publications model.

### C.1.7 The “ParkingAccess” package for the Truck Parking profile

#### Differences:

- The role “primaryRoad” became mandatory (i.e. multiplicity 1..\*) to get compliance with the EU Truck Parking regulation.
- The “Location” gets mandatory to get compliance with the EU Truck Parking regulation. At least one access for each parking site needs to define a location with point coordinates, i.e. with a “Point” specialisation and the “PointByCoordinates” class.

### C.1.8 The “Road” package for the Truck Parking profile

#### Differences:

The attributes “roadIdentifier” and “roadDestination” became mandatory to get compliance with the EU Truck Parking regulation.

### C.1.9 The “ParkingEquipmentOrServiceFacility” package for the Truck Parking profile

#### Differences:

- The enumeration “UserTypeEnum” is restricted to the values shown in Figure C.2.

#### Examples on using the ParkingEquipmentOrServiceFacility package:

- To specify a Truck Parking site without toilets:  
Use specialisation “Equipment” and  
“equipmentType” = “toilet”, “availability” = “notAvailable”
- To specify a Truck Parking site with a small restaurant:  
Use specialisation “ServiceFacility” and  
“serviceFacilityType” = “motorwayRestaurantSmall”, “availability” = “available”
- To specify a Truck Parking site with a truck wash with two washing lanes:  
Use specialisation “ServiceFacility” and  
“serviceFacilityType” = “truckWash”, “numberOfSubItems” = 2
- To specify an electric charging station for lorries:  
Use specialisation “Equipment” and  
“equipmentType” = “electricChargingStation”, “ElectricCharging” - “chargingStationUsageType” =  
“lorryPowerConsumption”

#### NOTES

- For each of the four examples above, a separate instance of “ParkingEquipmentOrServiceFacility” is necessary.
- Opening times, tariffs, location or a description of applicable vehicles can be added to each definition of equipment or service facilities.

- The “ParkingEquipmentOrServiceFacility” class can be aggregated to a “ParkingSite” itself (to specify elements available on the parking site) as well as to “ParkingSpaceBasics”, i.e. it can be aggregated to some group of parking spaces or to a single parking space (to specify electric charging stations for a dedicated parking space, for example).
- All instances of “ParkingEquipmentOrServiceFacility” class are referenced with an “equipmentOrServiceFacilityIndex”. Thus, they can be referenced in the dynamic part of the model to specify their current availability, for example.

#### **C.1.10 The “TariffsAndPayment” package for the Truck Parking profile**

##### **Differences:**

- For each parking site, either the attribute “freeOfCharge” in class “TariffsAndPayment” must be set “true” or at least one instance of the class “ChargeBand” shall be used to get compliance with the EU Truck Parking regulation. This rule does not apply for groups of parking sites.

#### **C.1.11 The “ParkingSpace” package for the Truck Parking profile**

##### **Differences:**

- The number of free spaces for lorries and the number of places for refrigerated goods need to be specified – either for the whole parking site or for a group of parking spaces – see Clauses A.2.3.d) and A.2.3.e) for details.

Like in the Parking Publications model, groups of parking spaces as well as single parking spaces can be specified. They can have dimensions and a georeference. More details on this can be found in the next Clause.

#### **C.1.12 The “ParkingSpaceBasics” package for the Truck Parking profile**

Figure C.2 shows the enumerations for the “ParkingSpaceBasics” package for the Truck Parking profile.

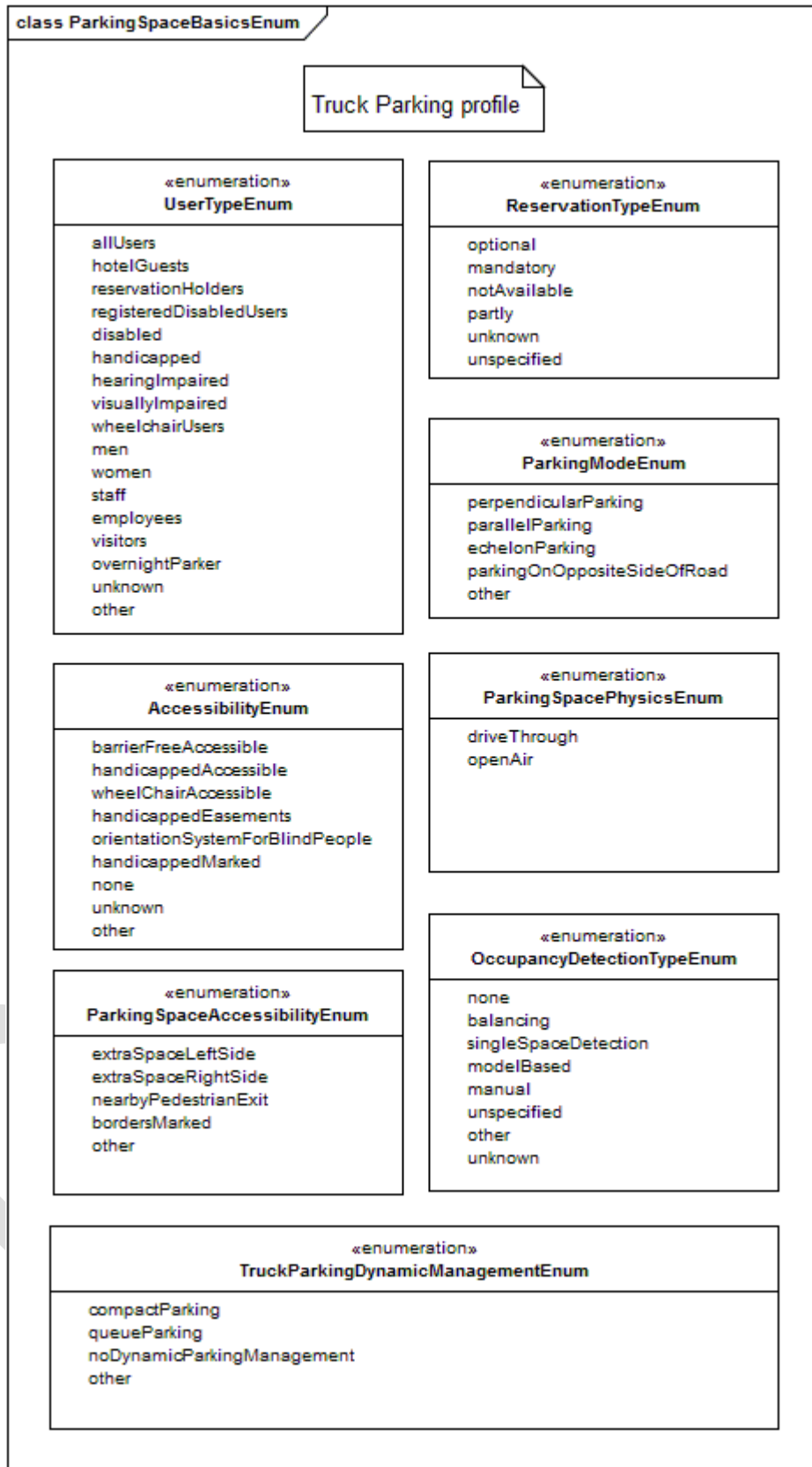


Figure C.2 — Enumerations for “ParkingSpaceBasics” for the Truck Parking profile

**Differences:**

- The “UserTypeEnum” is restricted to the values shown in Figure C.2.

**Hints to specify parking spaces or grouped parking spaces:**

- The properties defined in this package are valid for a single parking space or for a group of parking spaces (depending on the aggregation target of “ParkingSpaceBasics”). In the second case, all specified properties have to be the same for all parking spaces within the group. However, the spaces within the group may differ in properties that are not specified here.

EXAMPLE A group of parking spaces is defined with “parkingMode” = “parallelParking”. A “maximumParkingDuration” is not specified. Thus, all spaces within the group are arranged parallel to the road, but the maximum parking duration may differ on these spaces.

- A parking space, which can be left in the same direction than it was entered can be specified with “parkingSpacePhysics” = “driveThrough”.
- With “parkingMode”, it is possible to specify parallel parking, perpendicular parking (ninety degree according to a road) or echelon parking (diagonal).
- Dynamic truck parking management (“truckParkingDynamicManagement” in class “ParkingUsage Scenario”):
  - “compactParking”: Lorries are parking one after the other in different lanes; each lane has a dedicated time of departure (which might be displayed on a sign gantry).
  - “queueParking”: Lorries are parking in queues, one after the other. Each lorry must have an earlier time of departure than all the lorries behind him.

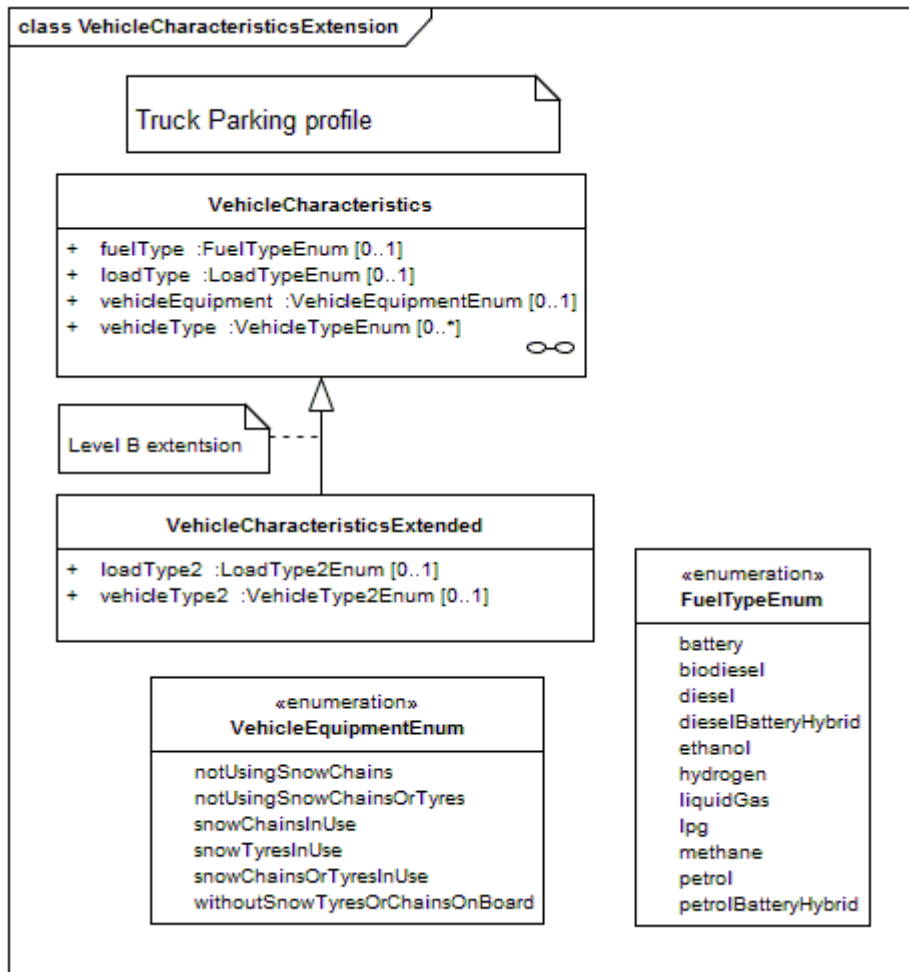
Like the Parking Publications model, the Truck Parking Publications model covers the following themes for “ParkingSpaceBasics”:

- Reference to entrances or exits
- Definition of equipment or service facilities
- Assignments (only, among others, prohibited) for parking permits, user types, vehicles characteristics, hazardous materials or by time

With the last bullet point, it is possible to declare mixed parking areas. For example, a group of parking spaces may be assigned to buses during the day and assigned to lorries during the night. For this purpose, two instances of “ParkingSpaceBasics” have to be used with different “TimePeriodByHour” and the “VehicleCharacteristics” - “vehicleType” = “bus” and the other with “vehicleType” = “lorry”. To specify, that both group declarations refer to the same physical group of spaces, the attribute “identicalToGroup” in class “GroupOfParkingSpaces” has to be used.

**C.1.13 The “VehicleCharacteristicsExtension” package for the Truck Parking profile**

Figures C.3 and C.4 show the “VehicleCharacteristicsExtension” package for Truck Parking together with its enumerations.



**Figure C.3 — The “VehicleCharacteristicsExtension” package for the Truck Parking profile with enumerations (I)**

NOTE Further Level A elements for “VehicleCharacteristics”, such as “HeightCharacteristics” or “WidthCharacteristics” etc. are also available in the Truck Parking profile (but not visualised here).



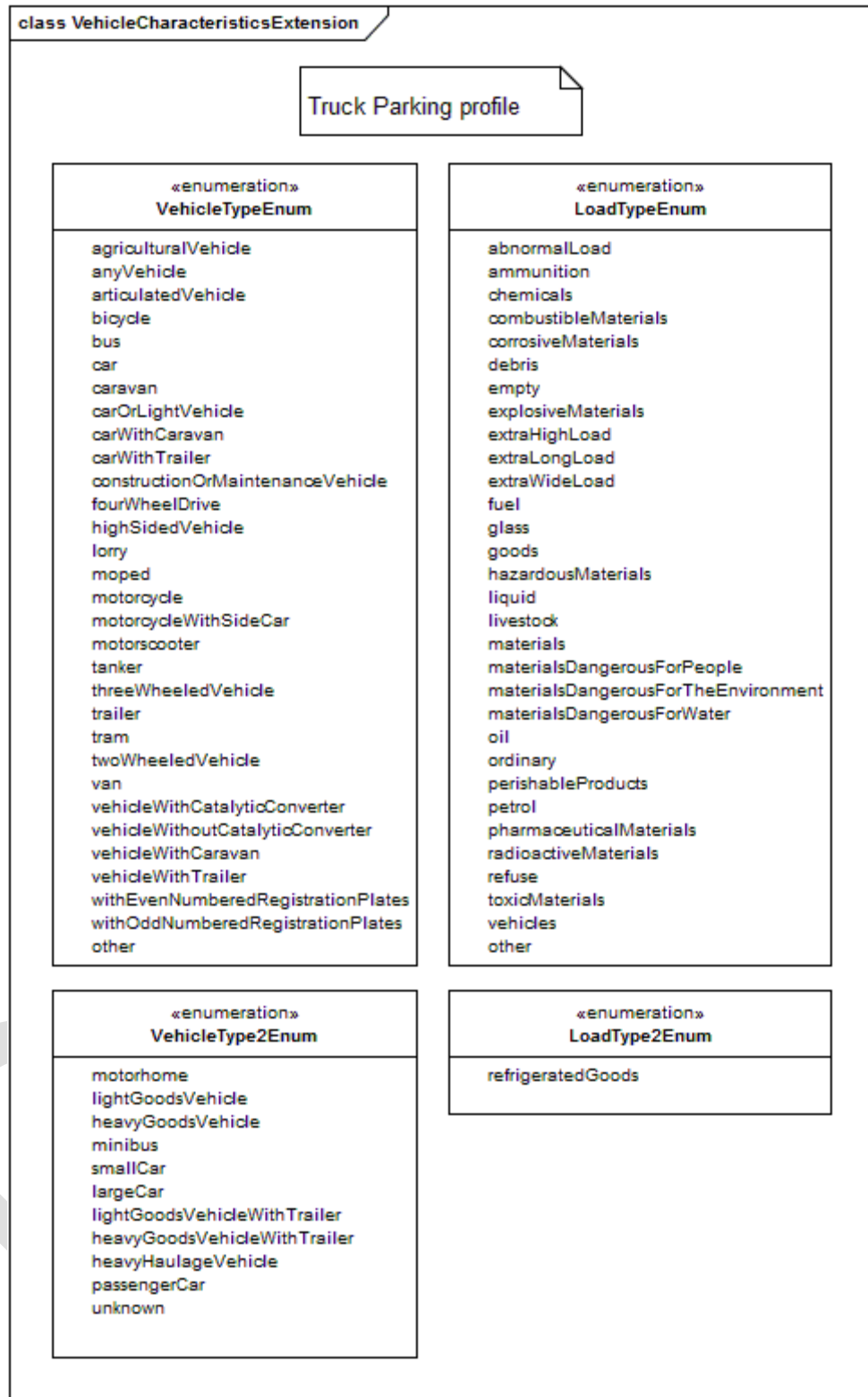


Figure C.4 — The “VehicleCharacteristicsExtension” package for the Truck Parking profile with enumerations (II)

**Differences:**

- The following attributes do not exist for the Truck Parking profile:
  - emissionClassification
  - operationFreeOfEmission
  - fuelType2
  - vehicleUsage, vehicleUsage2

**C.1.14 The “Junction” package for the Truck Parking profile**

There are no differences for the “Junction” package between the Truck Parking profile and the Parking Publications model.

**C.1.15 The “ParkingStandardsAndSecurity” package for the Truck Parking profile**

**Differences:**

The attribute “parkingSecurity” became mandatory (i.e. multiplicity 1..\*) to get compliance with the EU Truck Parking regulation.

## C.2 The Parking Status Publication model for the Truck Parking profile

### C.2.1 The “ParkingStatusPublication” package for the Truck Parking profile

There are no differences for the “ParkingStatusPublication” package between the Truck Parking Publications model and the Parking Publications model.

### C.2.2 The “ParkingRecordStatus” package for the Truck Parking profile

#### Differences:

- The number of free spaces for lorries needs to be specified – either for the whole parking or for a group of parking spaces – see Clause A.2.3.d) for details.
- At least one of the attributes “parkingSiteStatus” (class “ParkingSiteStatus”) or “parkingStatus Description” (class ParkingRecordStatus) shall be used to get compliance with the EU Truck Parking regulation.
- The attribute “parkingNumberOfVacantSpaces” is mandatory for each parking site (i.e. for the class “ParkingOccupancy” with aggregation target “ParkingSiteStatus” as specialisation of “ParkingRecordStatus”).

#### Specifying occupancy:

Figure C.5 shows all “ParkingOccupancy” attributes together with the enumerations available in this context.



Figure C.5 — “ParkingOccupancy” with enumerations

#### Specifying overcrowding:

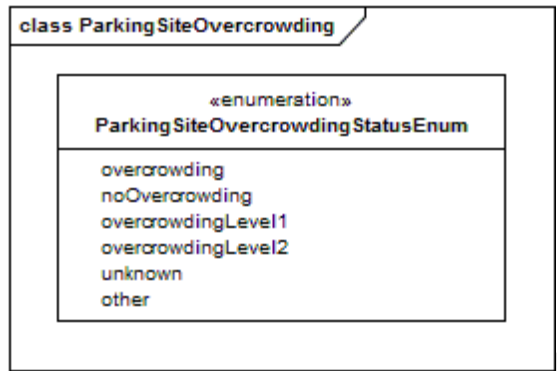


Figure C.6 — Enumeration values for “parkingSiteOvercrowdingStatus”

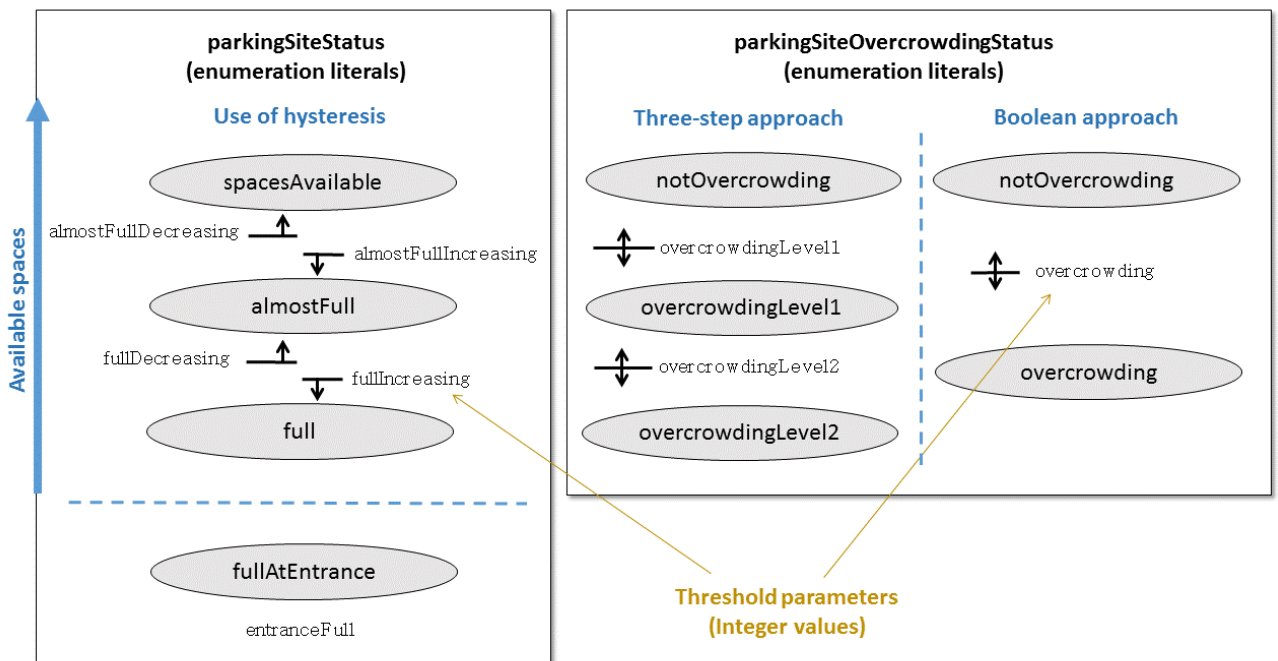
To specify overcrowding of a Truck Parking (i.e. more lorries on the parking than originally intended), it is possible to use the attribute “parkingSiteOvercrowdingStatus” (class “ParkingSiteStatus”). The enumeration values can be seen in Figure C.6.

It is possible either to use “overcrowding” and “notOvercrowding” or to use three stages: “notOvercrowding”, “overcrowdingLevel1” and “overcrowdingLevel2”. For these overcrowding literals, it is possible to define threshold values in the class “ParkingThresholds” (i.e. the number of vehicles, above which the specific overcrowding level is valid). It is possible to overwrite these (static) threshold values here in the dynamic part of the Parking Publications model.

Furthermore, it is possible to specify a value for the attribute “parkingLastMaximumOccupancy” in the static part of the (Truck) Parking Publications model. That is the number of vehicles (or lorries) which were last known to stay on the parking at the same time without a security risk. Usually, this number would be equal to or higher than the total number of parking spaces. This value can also be overridden in the dynamic part of the (Truck) Parking Publications model.

**Using Thresholds:**

The semantic of the attributes in class “ParkingThresholds” is visualised in Figure C.7:



### Figure C.7 — Thresholds for parking site status and overcrowding literals

Enumeration literals for attributes “parkingSiteStatus” and “parkingSiteOvercrowdingStatus” are shown as ovals. The threshold attributes, which are non-negative integer values, are shown in between in a stepped font. They are combined with up- and down arrows (or both).

**EXAMPLE** Semantic on the example of “fullIncreasing”: This is the number of available spaces below which the state of the parking site is considered to change from 'almost full' to 'full' as the facility's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.

In other words, between the states “full”, “almostFull” and “spacesAvailable” you can define two times a hysteresis. For example, the parking site should be considered to be “full”, when there are less than 3 spaces free, but “almostFull” may not happen before more than 5 spaces are free again (i.e. with 4 free spaces, the status might be ‘full’ or ‘almostFull’, depending on the trend).

The intention of this hysteresis is to prevent continuous switching of the state in case the number of available spaces always oscillates in a narrow range of values.

For the overcrowding values and for “fullAtEntrance” there is no hysteresis defined, i.e. the threshold values are directly switching the status in both directions.

#### C.2.3 The “VehicleCountAndRate” package for the Truck Parking profile

There are no differences for the “VehicleCountAndRate” package between the Truck Parking profile and the Parking Publications model.

### C.3 The Parking Vehicles Publication model

The Parking Vehicles Publication model is not an official part of the Truck Parking profile. Nevertheless, it can be used also for lorries.

## Annex D (informative)

### Comprehensive DATEX II profile for urban parking information

#### D.1 Overview

The Parking Publications model specified in Clauses 8 and 9 of this document is also capable of urban parking information, i.e. infrastructure and occupancy information for parking sites located in an urban context. Hence, a DATEX II profile for urban parking information (based on the Parking Publications model) is specified in this annex (here within further also called “urban profile”).

**NOTE** For a Truck parking site within an urban area, the use of the DATEX II profile for Truck Parking is recommended (see normative Annex B).

**NOTE** This annex specifies a comprehensive profile for urban parking information. A lean profile can be found in informative Annex E.

An overview on used classes can be found in informative Annex F.

#### D.2 Comprehensive DATEX II profile for urban parking information

##### D.2.1 General rules

For the urban profile, the following rules shall apply:

- a) The comprehensive DATEX II profile for urban parking information shall be a valid DATEX II data model following the rules defined in CEN/TS 16157-1.
- b) The comprehensive DATEX II profile for urban parking information shall be equal to the Parking Publications model defined in Clause 8 (“static part of the urban profile”) and Clause 9 (“dynamic part of the urban profile”), limited by the following DATEX II complaint rules.

**NOTE** Thus, package “ParkingVehiclesPublication” is not part of the urban profile.

##### D.2.2 Schema modification rules

For the urban profile, the following modifications of the model shall apply:

- a) The following classes shall not be part of the urban profile:

- i) “InterUrbanParkingSite”
- ii) “HarzardousMaterials”
- iii) “ServiceFacility”

**NOTE** Thus, “ParkingEquipmentOrServiceFacility” must be specialised as “Equipment”.

- iv) “RoadNode”
- v) “PointExtended”
- vi) “Junction”

- b) The following attributes (which are optional in the Parking Publications model) shall not be part of the urban profile:
- i) "labelSecurityLevel" (from class "ParkingStandardsAndSecurity")
  - ii) "labelSecurityLevelSelfAssessment" (from class "ParkingStandardsAndSecurity")
  - iii) "labelServiceLevel" (from class "ParkingStandardsAndSecurity")
  - iv) "labelServiceLevelSelfAssessment" (from class "ParkingStandardsAndSecurity")
  - v) "loadType2" (from class "VehicleCharacteristicsExtended")
  - vi) "overcrowding" (from class "ParkingThresholds")
  - vii) "overcrowdingLevel1" (from class "ParkingThresholds")
  - viii) "overcrowdingLevel2" (from class "ParkingThresholds")
  - ix) "parkingLastMaximumOccupancy" (from class "ParkingThresholds")
  - x) "parkingSiteOvercrowdingStatus" (from class "ParkingSiteStatus")
  - xi) "truckParkingDynamicManagement" (from class "ParkingUsageScenario")
  - xii) "winterEquipmentManagementType" (from class "ParkingRecordStatus")
- c) The following enumerations shall be restricted to a smaller set of literals that can be seen in figure D.1:
- i) "EquipmentTypeEnum" (see Table G.58 for original list of literals)  
NOTE There are no service facilities available in this profile.
  - ii) "GroupOfParkingSitesTypeEnum" (see Table G.61 for original list of literals)
  - iii) "ParkingUsageScenarioEnum" (see Table G.90 for original list of literals)
  - iv) "RestAreaActivityEnum" (see Table G.99 for original list of literals)

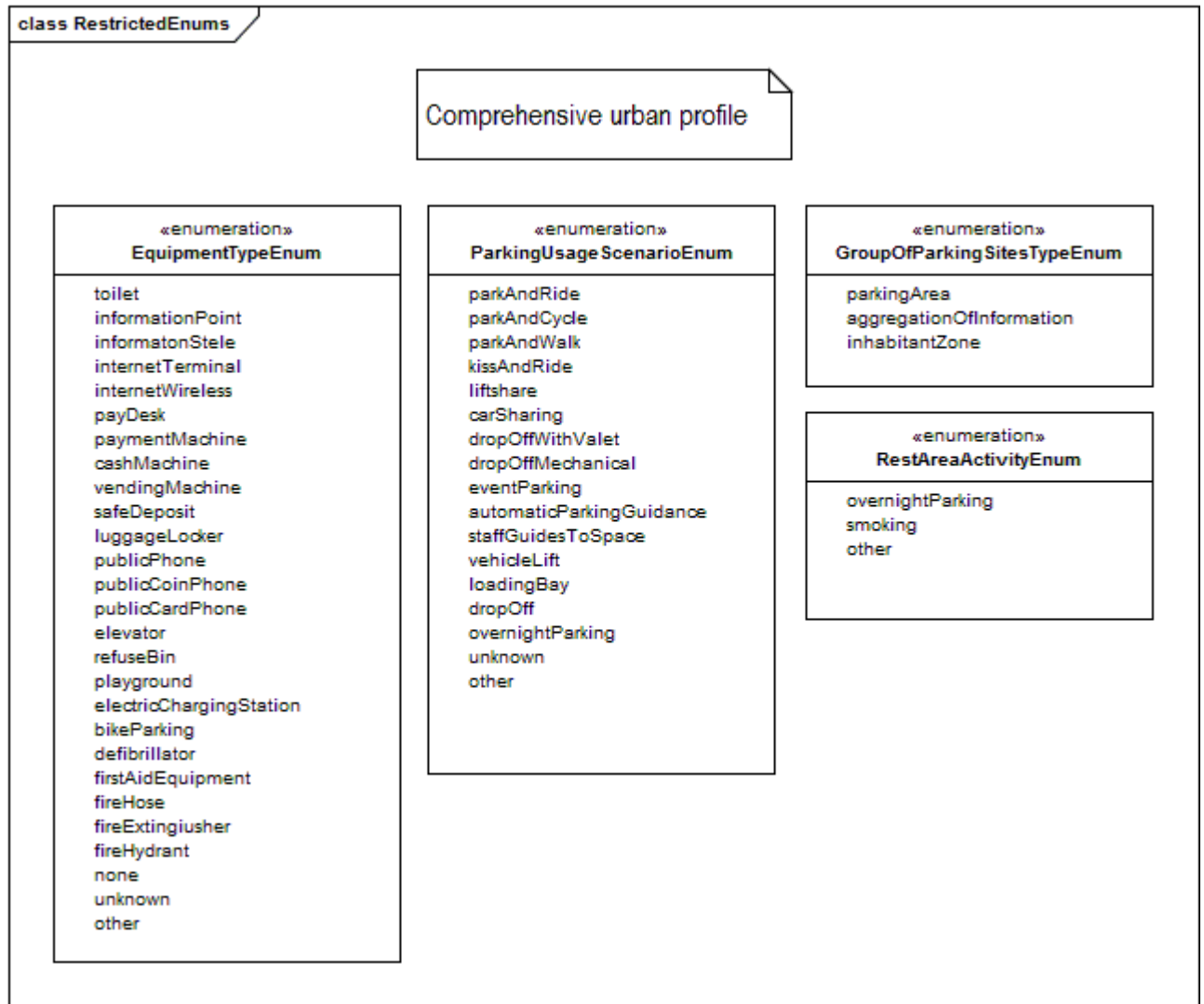


Figure D.1 — Restricted enumerations in comprehensive urban profile



## Annex E (informative)

### Lean DATEX II profile for urban parking

#### E.1 Overview

The Parking Publications model specified in Clauses 8 and 9 of this document is also capable of urban parking information, i.e. infrastructure and occupancy information for parking sites located in an urban context. Hence, a lean DATEX II profile for urban parking information (based on the Parking Publications model) is specified in this annex (here within further also called “lean urban profile”).

The intention of a lean urban profile is to provide an information structure on reduced complexity that may be used to describe urban parking information with focus on issues with capital importance only.

**NOTE** This annex specifies a lean profile for urban parking information. A comprehensive profile can be found in informative Annex E.

An overview on used classes can be found in informative Annex F.

**NOTE** In contrast to the comprehensive urban profile, this lean urban profile is not described by its delta to the Parking Publications model but by figures showing all aspects of the lean model (despite Level A elements like georeference information, vehicle characteristics etc. – they are available as well).

#### E.2 Lean DATEX II profile for urban parking

For the lean urban profile, the following rules shall apply:

- a) The lean DATEX II profile for urban parking information shall be a valid DATEX II data model following the rules defined in CEN/TS 16157-1.
- b) The lean DATEX II profile for urban parking information shall be a sub model of the Parking Publications model defined in Clause 8 (“static part of the lean urban profile”) and Clause 9 (“dynamic part of the lean urban profile”), restricted to the elements shown in the following figures of Clause E.2.

**NOTE** Thus, package “ParkingVehiclesPublication” is not part of the lean urban profile.



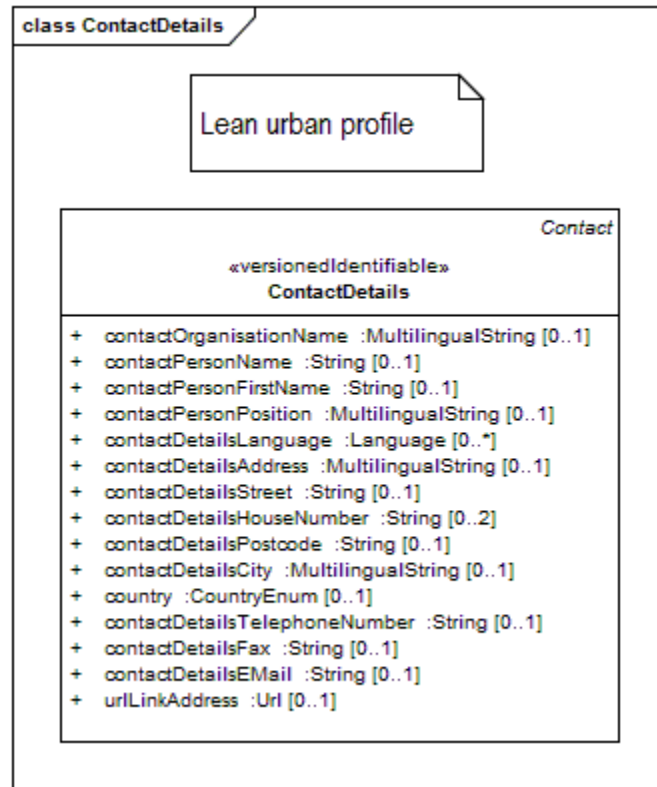


Figure E.2 — Contact details for lean urban profile

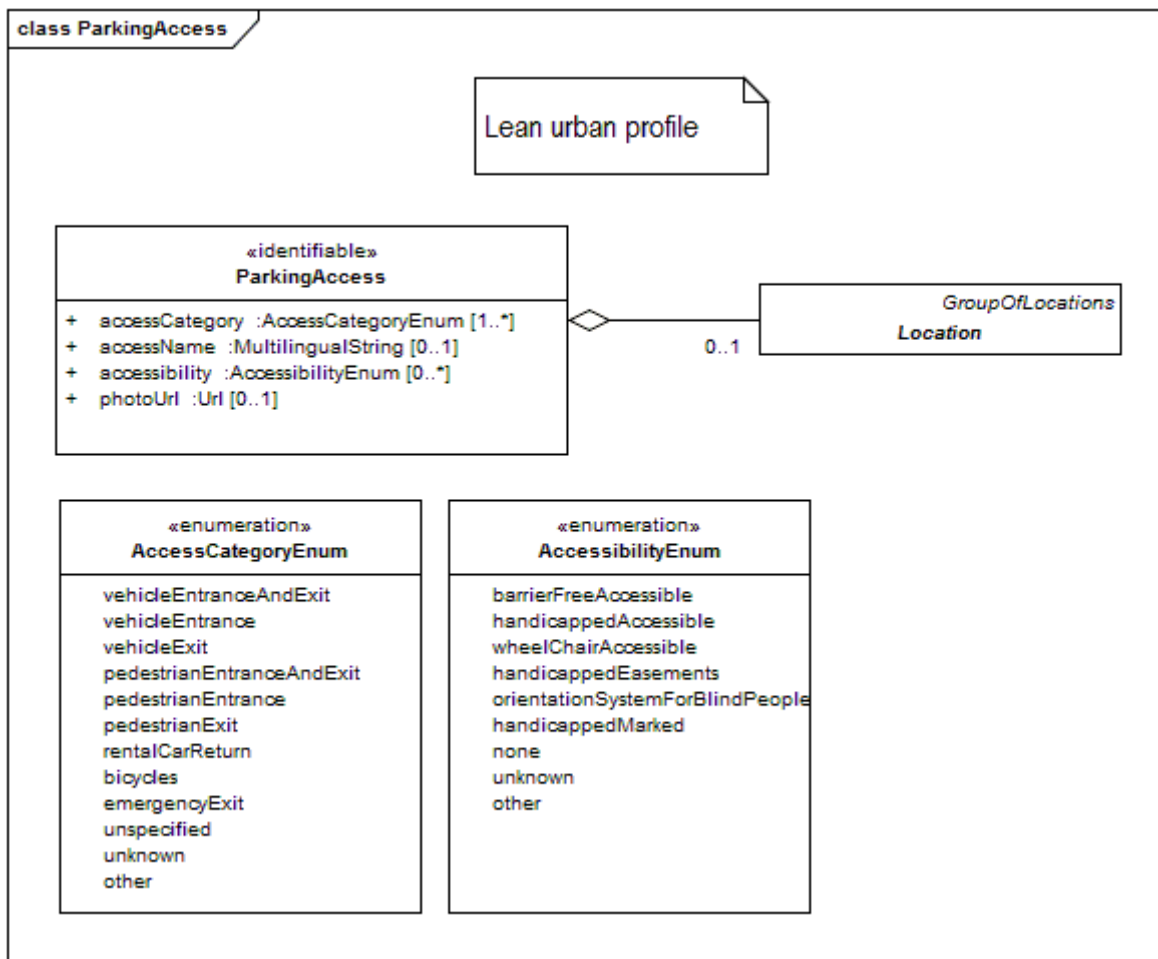


Figure E.3 — Parking access for lean urban profile

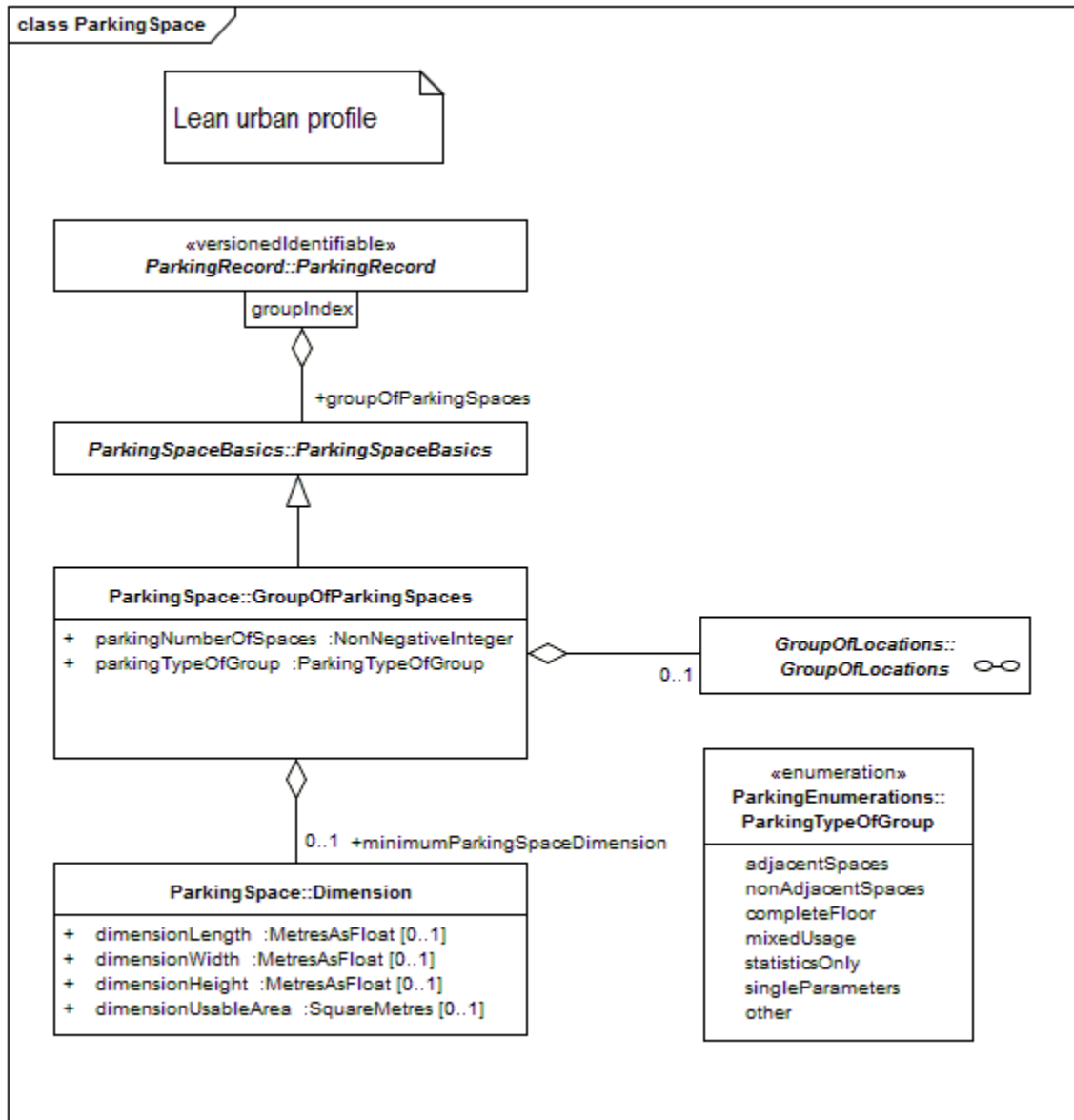


Figure E.4 — Group of parking spaces for lean urban profile

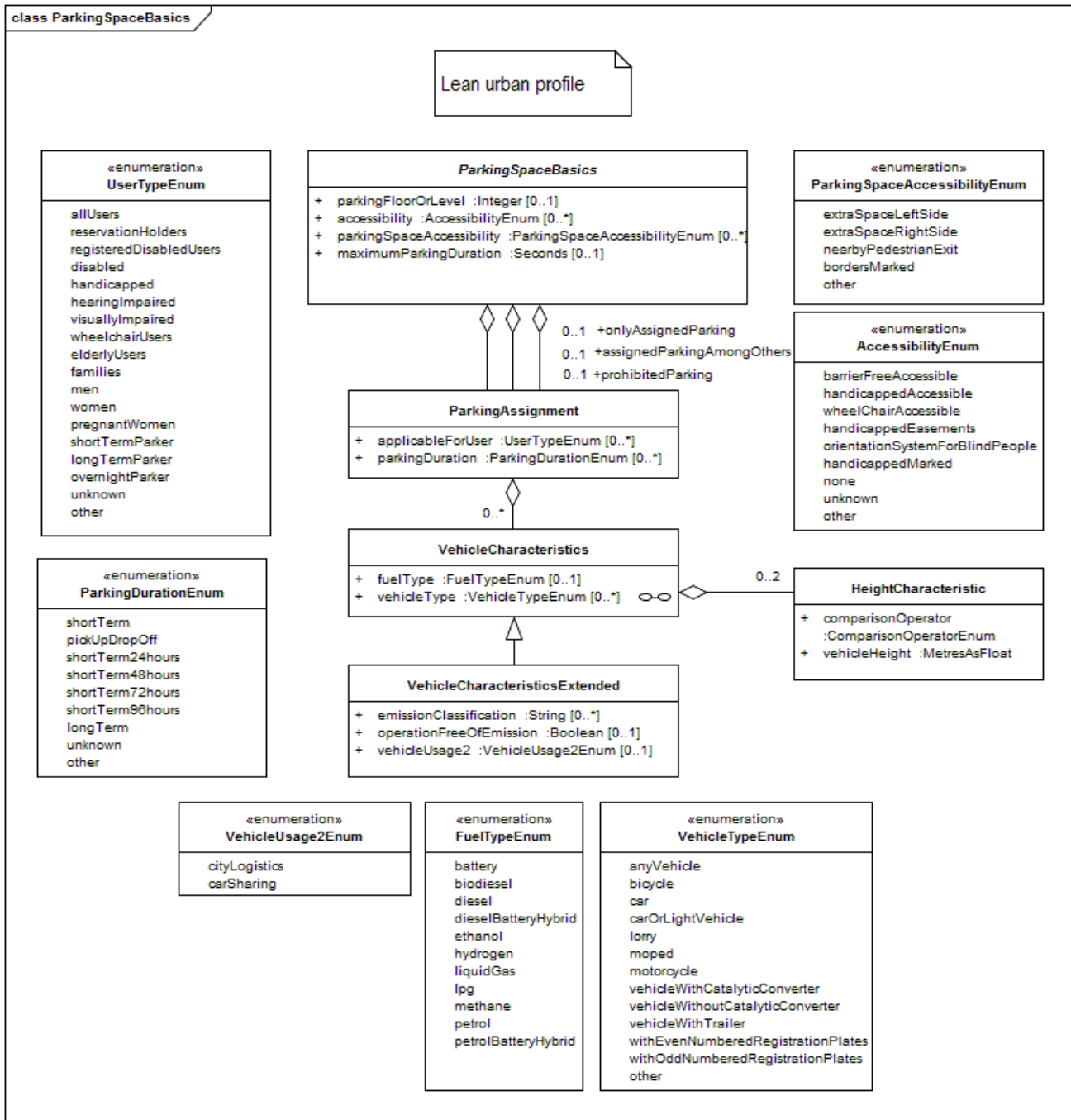


Figure E.5 — Parking space basics and parking assignment for lean urban profile

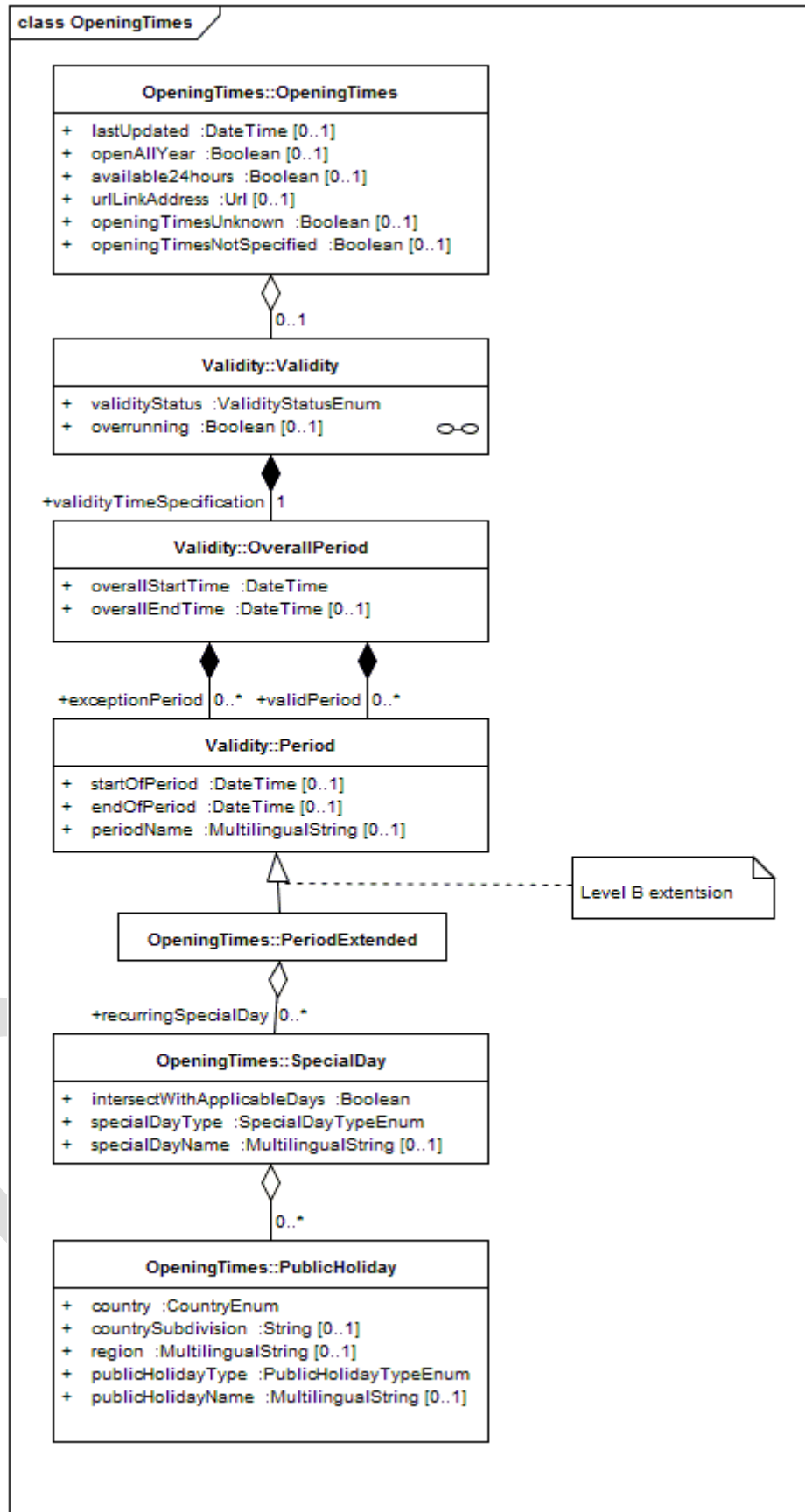


Figure E.6 — Opening times for lean urban profile

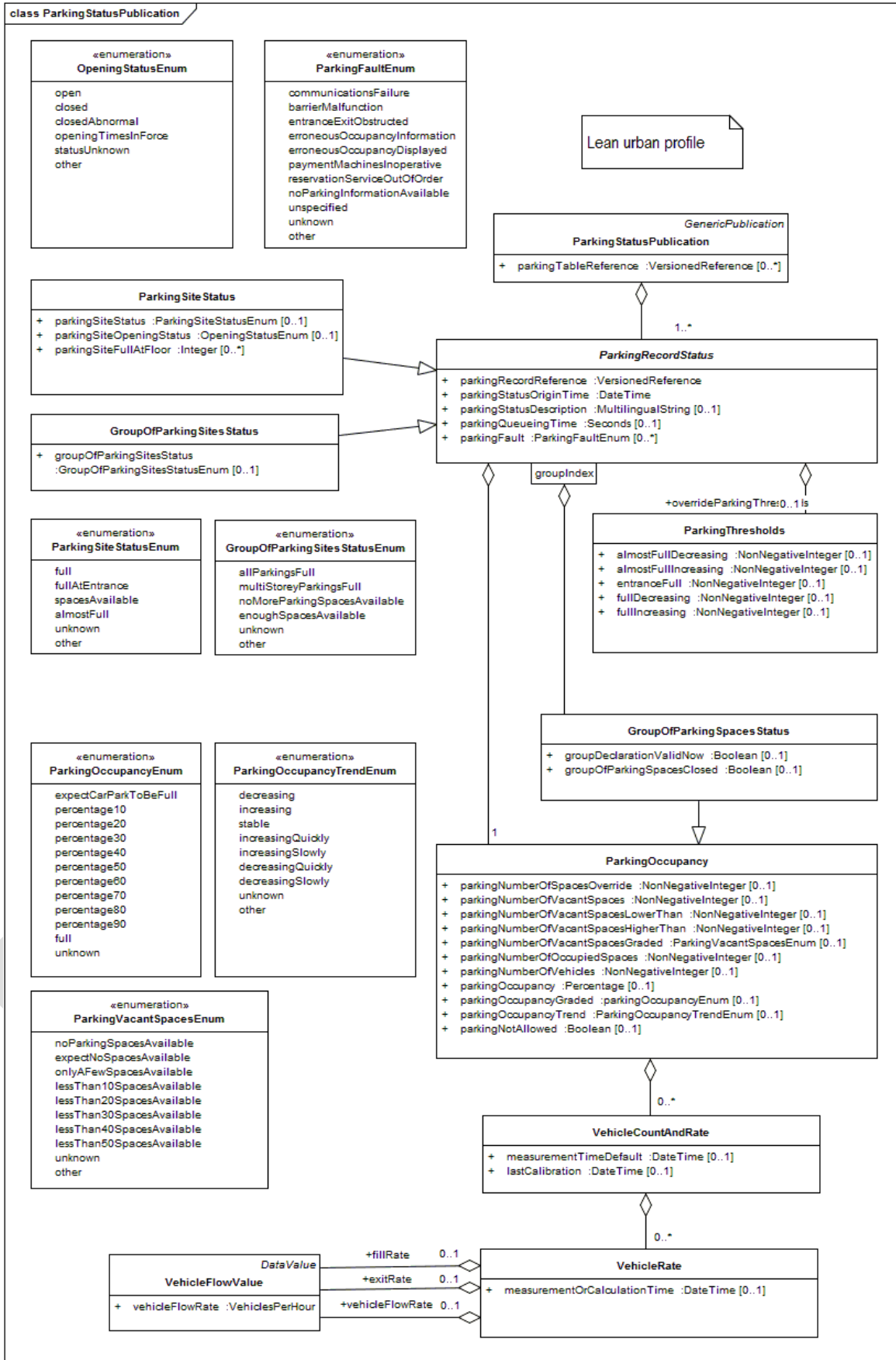


Figure E.7 — Parking status publication for lean urban profile



## Annex F (informative)

### Overview: Elements of the Parking Publications model and its profiles

#### F.1 Elements on publication level

Table F.1 provides an overview about the DATEX II publications and profiles specified in this Part of CEN/TS 16157. In essence, there are three different publications, which are denoted in the first column. They form the “Parking publications” (second column) and they form the base for three more profiles (last three columns).

In the matrix fields, you can see either the modification level for each combination publication/profile or the statement ‘not included’, because the “ParkingVehiclesPublication” is not part of any profile (which should not prevent you from using it in urban or truck parking environments).

Furthermore, you can also find the corresponding schema file names in this table. Printouts of all these schema files are part of this document.

**Table F.1 — Overview on publication level**

	Parking Model (Parking Publications)	Truck Parking profile (complies with EU Truck Parking regulation)	Comprehensive Urban Profile	Lean urban profile
	normative Clauses 8,9, H, J	normative Clauses A, B, C, I, J	informative Clause D	informative Clause E
<b>ParkingTablePublication</b>	full model <i>ParkingTablePublication.xsd</i>	some omissions and restrictions <i>TruckParkingTablePublication.xsd</i>	some omissions and restrictions <i>UrbanParkingTablePublication.xsd</i>	small subset <i>LeanUrbanParkingTablePublication.xsd</i>
<b>ParkingStatusPublication</b>	full model <i>ParkingStatusPublication.xsd</i>	very few restrictions <i>TruckParkingStatusPublication.xsd</i>	some omissions <i>UrbanParkingStatusPublication.xsd</i>	small subset <i>LeanUrbanParkingStatusPublication.xsd</i>
<b>ParkingVehiclesPublication</b>	full model <i>ParkingVehiclesPublication.xsd</i>	<i>not included</i>	<i>not included</i>	<i>not included</i>

#### F.2 Elements on class level

##### F.2.1 Overview

Each of the following three sub-Clauses provides a table for one type of publication. These tables provide a detailed view on the used class elements and their appearance in the different profiles. The general mode how to read these tables is explained in the following example based on Table F.2:

**EXAMPLE** The component “ParkingStandardsAndSecurity” is aggregated to a “ParkingSite” with multiplicity [0..1]. Of course, it is part of the Parking Publications.

In the Truck Parking profile, this aggregation is restricted to multiplicity [1], i.e. usage of the component “ParkingStandardsAndSecurity” is mandatory for each “ParkingSite”. Furthermore, mark “a” indicates that there are one or more attributes with a restricted multiplicity within this component (here it is “parkingSecurity”, which is changed to be mandatory, but this detail information cannot be covered by the table).

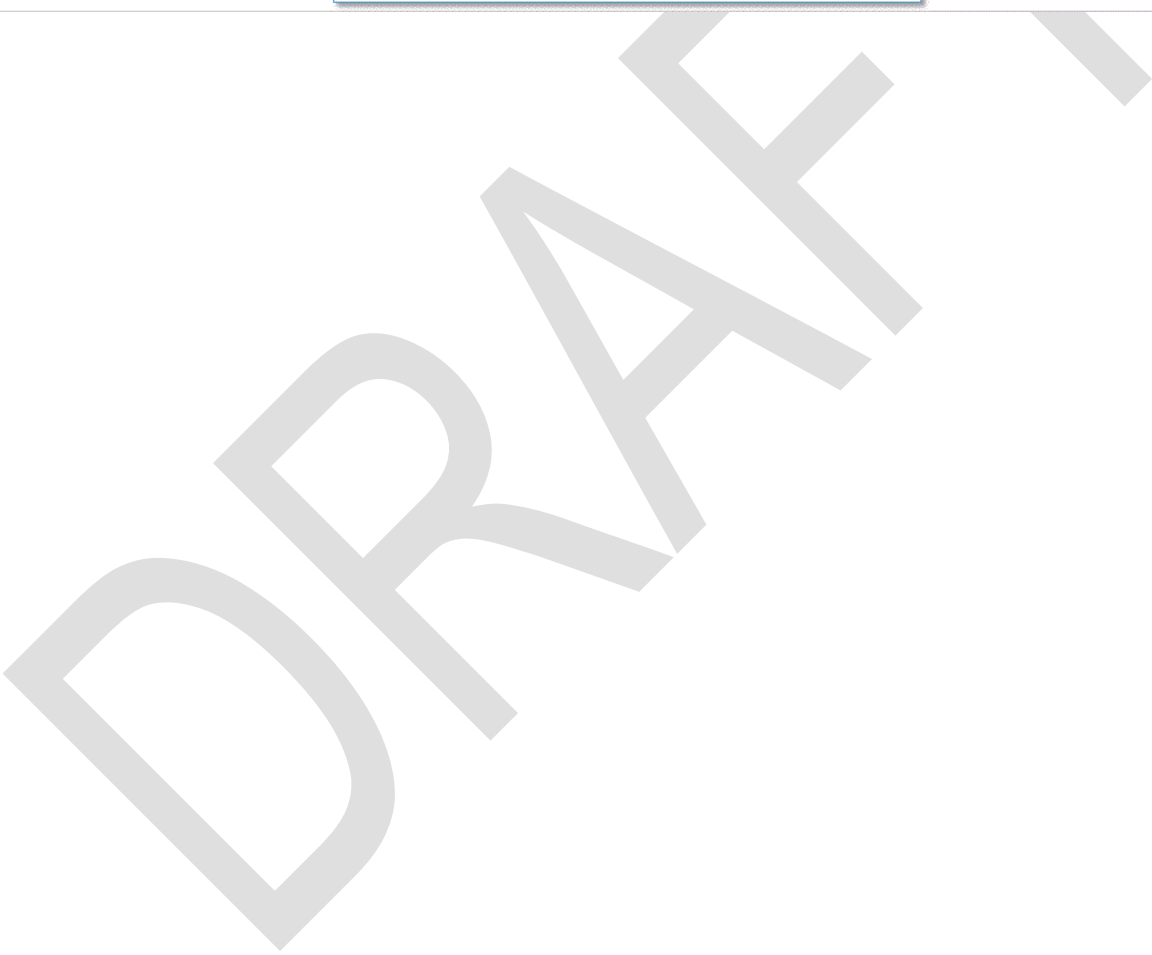
For the comprehensive urban parking profile, there are no changes to the multiplicity of the “ParkingStandardsAndSecurity” class, but there are attributes, which are not available in the comprehensive urban parking profile (mark “b”; here these missing attributes are those dealing with the ‘Label’ project categorisation, but these details cannot be covered by the table).

And finally: For the lean urban parking profile, the class “ParkingStandardsAndSecurity” is not available.

**Table F.2 — Reading example for the following tables (explained above)**

Parent Class	Element or Role	Remarks	Parking Publications	TruckParking Profile	Comprehensive urban profile	Lean urban profile
ParkingSite	ParkingStandardsAndSecurity		[0..1]	[1] a	[0..1] b	X

(A) Element is of Level A (and might have a sub model structure)  
 S Element is a specialisation of parent class  
 [...] Multiplicity information  
 dark fields: Changes referred to the Parking Publications column  
 a Restriction on some attribute multiplicities within the element  
 b Some attributes omitted within the element  
 c Restriction in enumeration literals within the element  
 X Element not available in this profile  
 XX Parent class is not available in this profile



### F.2.2 Elements of “ParkingTablePublication”

The following table provides a detailed view on the used class elements and their appearance in the different profiles of the “ParkingTablePublication”. Refer to Clause F.2.1 on how to read this table.

NOTE Some further Level B Extensions like “PeriodExtended” are not included in this table, elements from Level A (including georeference) are only denoted on a high level.

**Table F.3 — Elements of “ParkingTablePublication”**

Parent Class	Element or Role	Remarks	Parking Publications	TruckParking Profile	Comprehensive urban profile	Lean urban profile
ParkingTable	ParkingRecord		[1..*]	[1..*] a	[1..*]	[1..*] b
ParkingRecord	ParkingSite		S	S	S	S b
	GroupOfParkingSites		S	S c	S c	S c
	onlyAssignedParking	type "ParkingAssignment"	[0..1]	[0..1]	[0..1]	[0..1]
	assignedParkingAmongOthers		[0..1]	[0..1]	[0..1]	[0..1]
	prohibitedParking		[0..1]	[0..1]	[0..1]	[0..1]
	TariffsAndPayment		[0..1]	[0..1]	[0..1]	X
	ParkingEquipmentOrServiceFacility		[0..*]	[0..*] c	[0..*]	X
	ParkingSpace		[0..*]	[0..*]	[0..*]	X
	GroupOfParkingSpaces		[0..*]	[0..*]	[0..*]	[0..*] b
	ParkingThresholds	includes "ParkingStatusColourMapping"	[0..1]	[0..1]	[0..1]	b [0..1] b
	parkingColour	type "RGBColour"	[0..1]	[0..1]	[0..1]	X
	ParkingRoute	in Detail or by Reference; includes "ParkingRouteColour" and "GroupOfLocations"	[0..*]	[0..*] c	[0..*]	X
	ParkingVMS	includes "vmsOperator" with contact information	[0..1]	[0..1]	[0..1]	X
	emergencyContact		[0..*]	[0..*]	[0..*]	X
	owner	type "Contact" - in detail or by reference; includes	[0..*]	[0..*]	[0..*]	[0..*] b
	responsibleAuthority	"GroupOfLocations" and	[0..*]	[0..*]	[0..*]	X
	securityService	"validityOfContact" (type	[0..*]	[0..*]	[0..*]	X
	operator	"OverallPeriod", (A))	[0..*]	[1..*]	[0..*]	[0..*] b
	servicePartner		[0..*]	[0..*]	[0..*]	X
	parkingLocation	type "GroupOfLocations" (A)	[1]	[1]	[1]	[1]
	emergencyAssemblyPoint		[0..1]	[0..1]	[0..1]	X
	entireArea	type "Area" (A)	[0..1]	[0..1]	[0..1]	X
	PermitsAndProhibitions		[0..*]	[0..*]	[0..*] c	X
parkingRecordDimension	type "Dimension"	[0..1]	[0..1]	[0..1]	X	
ParkingSite	InterUrbanParkingSite		S	S	X	X
	UrbanParkingSite		S	S	S	S b
	SpecialLocationParkingSite		S	S	S	X
	ParkingUsageScenario	includes "scenarionAvailability" (type "OverallPeriod", (A))	[0..*]	[0..*] b,c	[0..*] b	X
	ParkingStandardsAndSecurity		[0..1]	[1] a	[0..1] b	X
	ParkingAccess		[0..*]	[1..*] c	[0..*]	[0..*] b
	OpeningTimes		[0..1]	[0..1]	[0..1]	[0..1]
	parkingSiteAddress	type "Contact" - remark see above	[0..*]	[1..*]	[0..*]	[0..*] b
reservationService		[0..*]	[0..*]	[0..*]	X	
GroupOfParkingSites	ParkingSite		[0..*]	[0..*]	[0..*]	[0..*] b
GroupOfParkingSpaces	dimensionsOfGroup	type "Dimension"	[0..1]	[0..1]	[0..1]	X
	minimumParkingSpaceDimension	type "Dimension"	[0..1]	[0..1]	[0..1]	[0..1]
	maximumParkingSpaceDimension		[0..1]	[0..1]	[0..1]	X
	GroupOfLocation	(A)	[0..1]	[0..1]	[0..1]	[0..1]
	ParkingSpace		[0..*]	[0..*]	[0..*]	X

- continued on next page -

Parent Class	Element or Role	Remarks	Parking Publications	TruckParking Profile	Comprehensive urban profile	Lean urban profile	
ParkingSpace	parkingSpaceDimensions	type "Dimension"	[0..1]	[0..1]	[0..1]	XX	
	Location	(A)	[0..1]	[0..1]	[0..1]	XX	
ParkingSpaceBasics	GroupOfParkingSpaces		S	S	S	S b	
	ParkingSpace		S	S	S	X	
	ParkingUsageScenario	includes "scenarioAvailability" (type "OverallPeriod", (A))	[0..*]	[0..*] b,c	[0..*] b	X	
	DedicatedAccess		[0..*]	[0..*]	[0..*]	X	
	ParkingEquipmentOrServiceFacility		[0..*]	[0..*] c	[0..*]	X	
	onlyAssignedParking	type "ParkingAssignment"	[0..1]	[0..1]	[0..1]	[0..1]	
	assignedParkingAmongOthers		[0..1]	[0..1]	[0..1]	[0..1]	
prohibitedParking	[0..1]		[0..1]	[0..1]	[0..1]		
ParkingAssignment	VehicleCharacteristics	(A)	[0..*]	[0..*] b	[0..*]	[0..*] b,c	
	ParkingPermit		[0..*]	[0..*]	[0..*]	X	
	HazardousMaterials	(A)	[0..*]	[0..*]	X	X	
	TimePeriodByHour		[0..*]	[0..*]	[0..*]	X	
ParkingEquipmentOrServiceFacility	Equipment	includes "ElectricCharging"	S	S	S c	XX	
	ServiceFacility		S	S	X	XX	
	TariffsAndPayment		[0..1]	[0..1]	[0..1]	XX	
	availabilityAndOpeningTimes	type "OpeningTimes"	[0..1]	[0..1]	[0..1]	XX	
	GroupOfLocations	(A)	[0..1]	[0..1]	[0..1]	XX	
	applicableForVehicles	type "VehicleCharacteristics" (A)	[0..*]	[0..*] b	[0..*]	XX	
ParkingAccess	primaryRoad	type "Road"	[0..*]	[1..*] a	[0..*]	X	
	accessProhibitedFor		[0..1]	[0..1]	[0..1]	X	
	accessAssignedAmongOthers	type "ParkingAssignment"	[0..1]	[0..1]	[0..1]	X	
	accessOnlyAssignedFor		[0..1]	[0..1]	[0..1]	X	
	OpeningTimes		[0..1]	[0..1]	[0..1]	X	
	Location	(A)	[0..1]	[1]	[0..1]	[0..1]	
TariffsAndPayment	ChargeBand		[0..*]	[0..*]	[0..*]	XX	
	ChargeBandByReference		[0..*]	[0..*]	[0..*]	XX	
	AcceptedPaymentCards		[0..1]	[0..1]	[0..1]	XX	
ChargeBand	Charge	includes "TimePeriodByHour"	[1..*]	[1..*]	[1..*]	XX	
	ParkingPermit		[0..*]	[0..*]	[0..*]	XX	
	applicableForVehicles	type "VehicleCharacteristics" (A)	[0..*]	[0..*] b	[0..*]	XX	
	applicableForPeriod	type "OverallPeriod" (A)	[0..1]	[0..1]	[0..1]	XX	
Road	RoadNode		S	S	X	XX	
OpeningTimes	Not all elements and constructs denoted here	Validity	(A)	[0..1]	[0..1]	[0..1]	
VehicleCharacteristics		VehicleCharacteristicsExtended	B	B	B	B b	
Location (A)		Area	(A)	S	S	S	S
		Point		S	S	S	S
		Linear	via "NetworkLocation" (A)	S	S	S	X
Point (A)		Junction	via "PointExtended"	[0..1]	[0..1]	X	X
Area (A)		PolygonArea		[0..*]	[0..*]	[0..*]	[0..*]
		NamedArea	via "AreaExtended"	[0..1]	[0..1]	[0..1]	[0..1]

(A) Element is of Level A (and might have a sub model structure)  
 S Element is a specialisation of parent class  
 B Element is a Level B extension of parent class  
 [...] Multiplicity information  
 dark fields: Changes referred to the Parking Publications column  
 a Restriction on some attribute multiplicities within the element  
 b Some attributes omitted within the element  
 c Restriction in enumeration literals within the element  
 X Element not available in this profile

### F.2.3 Elements of “ParkingStatusPublication”

Table F.4 provides a detailed view on the used class elements and their appearance in the different profiles of the “ParkingStatusPublication”. Refer to Clause F.2.1 on how to read this table.

**Table F.4 — Elements of “ParkingStatusPublication”**

Parent Class	Element or Role	Remarks	Parking Publications	TruckParking Profile	Comprehensive urban profile	Lean urban profile
ParkingStatusPublication	ParkingRecordStatus		[1..*]	[1..*]	[1..*] b	[1..*] b
ParkingRecordStatus	ParkingSiteStatus		S	S a	S b	S b
	GroupOfParkingSitesStatus		S	S	S	S
	ParkingEquipmentOr ServiceFacilityStatus		[0..*]	[0..*]	[0..*]	X
	ParkingSpaceStatus		[0..*]	[0..*]	[0..*]	X
	GroupOfParkingSpacesStatus		[0..*]	[0..*]	[0..*]	[0..*]
	ParkingThresholds	includes "ParkingStatusColourMapping"	[0..1]	[0..1]	[0..1] b	[0..1] b
	ParkingRouteStatus		[0..*]	[0..*]	[0..*]	X
	ParkingUsageScenarioStatus		[0..*]	[0..*]	[0..*]	X
	ParkingAccessStatus		[0..*]	[0..*]	[0..*]	X
	ParkingOccupancy		[1]	[1]	[1]	[1]
ParkingOccupancy	GroupOfParkingSpacesStatus		S	S	S	S
	VehicleCountAndRate		[0..*]	[0..*]	[0..*]	X
VehicleCountAndRate	VehicleCountWithinInterval		[0..*]	[0..*]	[0..*]	X
	VehicleRate		[0..*]	[0..*]	[0..*]	[0..*]
VehicleCountWithinInterval	numberOfIncomingVehicles	type "VehicleCountValue"	[0..1]	[0..1]	[0..1]	XX
	numberOfOutgoingVehicles		[0..1]	[0..1]	[0..1]	XX
	changeOfOccupiedSpaces	type "OccupancyChangeValue"	[0..1]	[0..1]	[0..1]	XX
	countedVehicles	type "VehicleCharacteristics" (A)	[0..1]	[0..1]	[0..1]	XX
VehicleRate	fillRate		[0..1]	[0..1]	[0..1]	[0..1]
	exitRate	type "VehicleFlowRate"	[0..1]	[0..1]	[0..1]	[0..1]
	vehicleFlowRate		[0..1]	[0..1]	[0..1]	[0..1]
	measuredVehicles	type "VehicleCharacteristics" (A)	[0..1]	[0..1]	[0..1]	X
VehicleCharacteristics	VehicleCharacteristicsExtended		B	B	B	XX

(A) Element is of Level A (and might have a sub model structure)  
 S Element is a specialisation of parent class  
 B Element is Level B extension of parent class  
 [...] Multiplicity information  
 dark fields: Changes referred to the Parking Publications column  
 a Restriction on some attribute multiplicities within the element  
 b Some attributes omitted within the element  
 X Element not available in this profile

**F.2.4 Elements of “ParkingVehiclesPublication”**

Table F.5 provides a detailed view on the used class elements of the “ParkingVehiclesPublication”. Refer to Clause F.2.1 on how to read this table.

NOTE The “ParkingVehiclesPublication” neither belongs to the Truck Parking profile, the comprehensive urban parking profile nor to the lean urban profile.

**Table F.5 — Elements of “ParkingVehiclesPublication”**

Parent Class	Element or Role	Remarks	Parking Publications
ParkingVehiclesPublication	ParkingVehicle		[1..*]
ParkingVehicle	ParkingPermit		[0..1]
	Vehicle	(A)	[1]
	IndividualCharge	includes "UsedPaymentCard"	[0..1]
	parkingPeriod	type "OverallPeriod" (A)	[0..1]

(A) Element is of Level A (and might have a sub model structure)  
 [...] Multiplicity information

## Annex G (normative)

### Data Dictionary

#### G.1 Overview

This data dictionary identifies the definitions and characteristics of the different classes, attributes, association roles, data types and enumerations appearing in the data model defined in clauses 7, 8 and 8.19.2. The data dictionary is specified in three parts for each of the three publications, one for packages, one for <<datatypes>> and one for <<enumerations>>, each ordered alphabetically.

The generic data types which are used throughout all publications are defined in Part 1 of CEN/TS 16157 Annex E Clause E5.

The first part of the data dictionary for each publication is partitioned into sub-Clauses which relate to each of the UML model packages and each sub-Clause defines the contained classes, their attributes and any roles defined for associations between the classes within that package.

The Data Dictionary tables use the following columns:

- 1) Column **Class name**: it provides the symbolic name (Upper Camel Case) given to the corresponding class.
- 2) Column **Role name**: it provides the symbolic name (Lower Camel Case) given to the corresponding role of an association.
- 3) Column **Attribute name**: it provides the symbolic name (Lower Camel Case) given to the corresponding attribute of a class.
- 4) Column **Enumerated value name**: It provides the symbolic name (Lower Camel Case) given to the corresponding enumerated value.
- 5) Column **Designation**: it provides the corresponding name in natural language of the corresponding class, attribute, role or enumeration value.
- 6) Column **Definition**: it provides a comprehensive definition detailing the class, attribute or role.
- 7) Column **Stereotype**: it provides a statement of the stereotype that is assigned to the class, if any - see Part 1 CEN/TS 16157 Annex A Clause C3 for further details.
- 8) Column **Abstract**: it provides a statement as to whether the class is abstract (non realisable) or concrete (realisable).
- 9) Column **Multiplicity**: it provides a statement of the allowed multiplicity for the attribute or role.
- 10) Column **Target**: It provides the name of the class which is at the end of the association to which the role applies.
- 11) Column **Type**: it provides the name of the class used to define the data type relating to the attribute of the class.

## G.2 Data Dictionary for "Parking Publications"

### G.2.1 "GenericPublication" package

#### G.2.1.1 "GenericPublication" package classes

Class name	Designation	Definition	Stereotype	Abstract
GenericPublication	Generic publication	A publication used to make level B extensions at the publication level.		no

Table G.1— Classes of the "GenericPublication" package

#### G.2.1.2 "GenericPublication" package association roles

There are no defined association roles in the "GenericPublication" package.

#### G.2.1.3 "GenericPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GenericPublication	genericPublicationName	Generic publication name	The name of the generic publication.	1..1	String

Table G.2— Attributes of the "GenericPublication" package

### G.2.2 "Junction" package

#### G.2.2.1 "Junction" package classes

Class name	Designation	Definition	Stereotype	Abstract
Junction	Junction	Junction (on a highway), can also be an interchange or if applicable also a motorway service station (see junctionClassification).		no
PointExtended	Point extended	Extension point for 'Point' to support the description of junctions (and other alternative point descriptions).		no

Table G.3— Classes of the "Junction" package

#### G.2.2.2 "Junction" package association roles



Class name	Role name	Designation	Definition	Multiplicity	Target
Junction	destinationMotorway	Destination motorway	In case of any type of intersection, the destination motorway(s) can be defined.	0..*	Road
	motorway	Motorway	A detailed identification of the motorway the junction belongs to.	0..1	Road

Table G.4— Associations of the "Junction" package

## G.2.2.3 "Junction" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Junction	junctionClassification	Junction classification	Explicit type of junction.	0..1	JunctionClassificationEnum
	junctionName	Junction name	Name of the junction.	1..1	MultilingualString
	junctionNumber	Junction number	Number of the junction, might also include letters (example: 23A).	0..1	String
PointExtended	description	Description	Textual description for a point location	0..1	MultilingualString

Table G.5— Attributes of the "Junction" package

## G.2.3 "OpeningTimes" package

## G.2.3.1 "OpeningTimes" package classes

Class name	Designation	Definition	Stereotype	Abstract
OpeningTimes	Opening times	A specification of opening times (e.g. for a parking site, a service facility, an access or the availability for equipment).		no
PeriodExtended	Period extended	An extension point for Period offering the possibility to describe special days and public holidays.		no
PublicHoliday	Public holiday	Specification of the public holiday type in a specific country or region. Use this component only when specialDayType is set to 'publicHoliday' or 'holidays'.		no

Class name	Designation	Definition	Stereotype	Abstract
SpecialDay	Special day	Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a public holiday (country specific).		no

Table G.6— Classes of the "OpeningTimes" package

## G.2.3.2 "OpeningTimes" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
PeriodExtended	recurringSpecialDay	Recurring special day	A recurring period in terms of special days.	0..*	SpecialDay

Table G.7— Associations of the "OpeningTimes" package

## G.2.3.3 "OpeningTimes" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
OpeningTimes	available24hours	Available24hours	Specifies if the availability is 24 hours a day. If omitted, this information is unknown or heterogeneous.	0..1	Boolean
	lastUpdated	Last updated	The date/time at which this information was last updated.	0..1	DateTime
	openAllYear	Open all year	indicates whether the parking facility is available 365 days a year	0..1	Boolean
	openingTimesNotSpecified	Opening times not specified	When true, the opening times are not specified.	0..1	Boolean
	openingTimesUnknown	Opening times unknown	When true, the opening times are unknown.	0..1	Boolean
	urlLinkAddress	URL link address	A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.	0..1	Url
PublicHoliday	country	Country	ISO 3166-1 two character country code.	1..1	CountryEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	countrySubdivision	Country subdivision	ISO 3166-2 country sub-division code (up to 3 characters).	0..1	String
	publicHolidayName	Public holiday name	Specification of public holiday, if the enumeration values do not fit.	0..1	MultilingualString
	publicHolidayType	Public holiday type	Specifies the public holiday type for the country or region.	1..1	PublicHolidayTypeEnum
	region	Region	Region of country (e.g. "Scotland", "Wales" etc. if country = GB)	0..1	MultilingualString
SpecialDay	intersectWithApplicableDays	Intersect with applicable days	When true, the period is the intersection of applicable days and this special day. When false, the period is the union of applicable days and this special day."	1..1	Boolean
	specialDayName	Special day name	Specification of a special day, if the enumeration values do not fit.	0..1	MultilingualString
	specialDayType	Special day type	Specification of a special day, for example schoolDay, electionDay, ..	1..1	SpecialDayTypeEnum

Table G.8— Attributes of the "OpeningTimes" package

## G.2.4 "ParkingAccess" package

### G.2.4.1 "ParkingAccess" package classes

Class name	Designation	Definition	Stereotype	Abstract
ParkingAccess	Parking access	Describes one entrance or exit (or both) to a parking site.	identifiable	no

Table G.9— Classes of the "ParkingAccess" package

### G.2.4.2 "ParkingAccess" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingAccess	accessAssignedAmongOthers	Access assigned among others	The assignment given in this class is convenient for this access, but not exclusionary. By using this role, do not use the same set of attributes within the other two roles.	0..1	ParkingAssignment
	accessOnlyAssignedFor	Access only assigned for	Only the assignment given in this class is allowed for this access, i.e. other assignments are not allowed. By using this role, do not use the same set of attributes within the other two roles.	0..1	ParkingAssignment
	accessProhibitedFor	Access prohibited for	The assignment given in this class is prohibited for this access. By using this role, do not use the same set of attributes within the other two roles.	0..1	ParkingAssignment
	primaryRoad	Primary road	Identification for up to two primary roads located nearby the access or which make the parking accessible.	0..*	Road

**Table G.10— Associations of the "ParkingAccess" package**

**G.2.4.3 "ParkingAccess" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingAccess	accessCategory	Access category	Specifies the category(s) of this access.	1..*	AccessCategoryEnum
	accessEquipment	Access equipment	Specifies additional equipment for this access.	0..*	AccessEquipmentEnum
	accessibility	Accessibility	Information on accessibility, easements and marking for handicapped people.	0..*	AccessibilityEnum
	accessName	Access name	A name of the entrance or exit. This might be an indication to the corresponding road, for example.	0..1	MultilingualString

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	photoUrl	Photo url	Specifies a URL at which a photo of the object in concern can be found.	0..1	Url

Table G.11— Attributes of the "ParkingAccess" package

## G.2.5 "ParkingEquipmentOrServiceFacility" package

### G.2.5.1 "ParkingEquipmentOrServiceFacility" package classes

Class name	Designation	Definition	Stereotype	Abstract
ElectricCharging	Electric charging	Additional information for the equipment 'electricChargingStation'. This component refers to the number of charging stations specified in the attribute 'numberOfEquipmentOrServiceFacilities'.		no
Equipment	Equipment	One type of equipment, that is available on the parking site.		no
ParkingEquipmentOrServiceFacility	Parking equipment or service facility	One type of equipment or additional service facility that is available at the parking site, parking space or group of parking spaces.		yes
ServiceFacility	Service facility	One type of service facility that is available on the parking site or located next to it. You can specify the number of this service facility type (e.g. 5 restaurants) as well as the number of subitems (e.g. 200 restaurant places).		no

Table G.12— Classes of the "ParkingEquipmentOrServiceFacility" package

### G.2.5.2 "ParkingEquipmentOrServiceFacility" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingEquipmentOrServiceFacility	applicableForVehicles	Applicable for vehicles		0..*	VehicleCharacteristics
	availabilityAndOpeningTimes	Availability and opening times	Specify the general availability of some equipment or service facility (by using just the 'OverallPeriod' component) or specify its opening times more detailed.	0..1	OpeningTimes

Table G.13— Associations of the "ParkingEquipmentOrServiceFacility" package

G.2.5.3 "ParkingEquipmentOrServiceFacility" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ElectricCharging	chargingStationConnectorType	Charging station connector type	Connector type(s) for the electric charging station(s).	0..*	MultilingualString
	chargingStationModelType	Charging station model type	Model type of the electric charging station(s). Brand or company information can be specified in 'ParkingEquipmentOrServiceFacility'. For more than one type of model, use several instances of 'ParkingEquipmentOrServiceFacility'.	0..1	MultilingualString
	chargingStationUsageType	Charging station usage type	Usage type of the electric charging station(s).	1..*	ChargingStationUsageTypeEnum
	maximumCurrent	Maximum current	The maximum current of the electric charging station(s) (in Ampere).	0..1	Ampere
	numberOfChargingPoints	Number of charging points	Number of vehicles or devices, which can be charged simultaneously (sum over all electric charging stations specified with the 'numberOf...' attribute). If omitted, 1 charging point per station is assumed.	0..1	NonNegativeInteger
	voltage	Voltage	Available Voltage(s) of the electric charging station(s).	0..*	Volt
Equipment	equipmentType	Equipment type	One type of equipment, that is available on the parking site.	1..1	EquipmentTypeEnum
ParkingEquipmentOrServiceFacility	accessibility	Accessibility	Information on accessibility, easements and marking for handicapped people.	0..*	AccessibilityEnum
	additionalDescription	Additional description	Provides an additional description.	0..1	MultilingualString
	applicableForUser	Applicable for user	Limitation to a set of special users.	0..*	UserTypeEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	availability	Availability	Specifies, if the element in question is available or not. Note that this is no dynamic information!	0..1	AvailabilityEnum
	comment	Comment	A free text comment that can be used by the operator to convey un-coded observations/information.	0..1	MultilingualString
	equipmentOrServiceFacilityIdentifier	Equipment or service facility identifier	An internal identifier for the equipment or service facility, e.g. an inventory number. This attribute has an unbounded multiplicity to support identifiers for multiple occurrences of this element.	0..*	String
	nameOrBrand	Name or brand	Name or brand of the equipment or service facility, e.g. brand of petrol station, name of the WC-Service etc.	0..1	MultilingualString
	numberOfEquipmentOrServiceFacility	Number of equipment or service facility	Number of the specified element (e.g. number of toilets, restaurants, park & ride places, etc.) with respect to user restriction for the parking record, a complete group of spaces or a single space. Dynamic overridable.	0..1	NonNegativeInteger
	otherEquipmentOrServiceFacility	Other equipment or service facility	Specifies the additional equipment or service facility, if the enumerations provided do not fit. Use literal 'other' in this case.	0..1	MultilingualString
	photoUrl	Photo url	Specifies a URL at which a photo of the object in concern can be found.	0..1	Url
ServiceFacility	distanceFromParkingSite	Distance from parking site	If the service facility is not located on the parking site itself, its distance can be specified here in metres.	0..1	MetresAsNonNegativeInteger
	numberOfSubitems	Number of subitems	The quantity of sub items to this service facility type, e.g. the total number of restaurant places or fuel dispensers etc.	0..1	NonNegativeInteger

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	serviceFacilityType	Service facility type	One type of service, that is available on the parking site.	1..1	ServiceFacilityTypeEnum

Table G.14— Attributes of the "ParkingEquipmentOrServiceFacility" package

## G.2.6 "ParkingRecord" package

### G.2.6.1 "ParkingRecord" package classes

Class name	Designation	Definition	Stereotype	Abstract
Contact	Contact	Address and contact information about some person, service or the parking site, provided in detail or via reference.		no
ContactByReference	Contact by reference	Contact information that is addressed via a reference.		no
ContactDetails	Contact details	Details for some person, service or the parking site itself, especially address information.	versionedIdentifiable	no
ParkingRecord	Parking record	A container for static parking information. Must be specialised as a parking site or as a group of parking sites.	versionedIdentifiable	yes
ParkingRoute	Parking route	A parking route, defined by ParkingRouteDetails or by a reference.		yes
ParkingRouteByReference	Parking route by reference	A route defined by a reference to an earlier specified route.		no
ParkingRouteDetails	Parking route details	Urban context: Defining parking routes leading to the parking site. Truck parking context: Can be used to define a dynamic route management.	versionedIdentifiable	no
ParkingStatusColourMapping	Parking status colour mapping	Defines a pair of 'parkingSiteStatus' and a corresponding colour.		no
ParkingThresholds	Parking thresholds	Configuration parameters of the parking site, used among others for the dynamic attribute 'parkingStatus'. This component or all elements of it can be overridden in the dynamic model.		no
ParkingVMS	Parking v m s	A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the parking site (e.g. to indicate to drivers the current availability of spaces).		no



Class name	Designation	Definition	Stereotype	Abstract
PermitsAndProhibitions	Permits and prohibitions	Defines sets of action and regulations to specify permitted and prohibited issues.		no
RGBColour	R g b colour	An RGB colour described by values for red, green and blue (0..255) as well as an optional name.		no

Table G.15— Classes of the "ParkingRecord" package

## G.2.6.2 "ParkingRecord" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
Contact	validityOfContact	Validity of contact		0..1	OverallPeriod
ParkingRecord	assignedParkingAmongOthers	Assigned parking among others	Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for this kind of assignment.	0..1	ParkingAssignment
	emergencyAssemblyPoint	Emergency assembly point	Some geographic location(s) within or nearby the parking, where people have to meet in case of a fire, for example.	0..1	GroupOfLocations
	emergencyContact	Emergency contact	Contact to be used in times of emergencies.	0..*	Contact
	entireArea	Entire area	An underlying area this parking record is located in or belongs to. Examples are a state, province, truck parking area etc. A name can be specified in the area structure.	0..1	Area
	groupOfParkingSpaces	Group of parking spaces	Properties for a group of parking spaces. Usually, all properties specified have to be the same for all spaces included. This aggregation may only be used with the "GroupOfParkingSpaces" specialisation.	1..1	ParkingSpaceBasics

Class name	Role name	Designation	Definition	Multiplicity	Target
	onlyAssignedParking	Only assigned parking	Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of attributes.	0..1	ParkingAssignm ent
	operator	Operator	Contact details of the operator of the parking facility.	0..*	Contact
	owner	Owner	Contact details of the owner of the parking facility.	0..*	Contact
	parkingColour	Parking colour	A colour, which can be assigned to the parking. Often used with parking areas for a quick visual distinction.	0..1	RGBColour
	parkingLocation	Parking location	The location(s) or the extent of the parking. Examples could be an Area for parking area, a Point location for an urban parking facility or a Linear for on street parking.	1..1	GroupOfLocatio ns
	parkingRecordDimensi on	Parking record dimension	Dimension either of the building or a virtual rectangle encapsulating the parking site(s). Use 'dimensionUsableArea' to define the total space available for parking. Use 'dimensionHeight' only for a building, not for the restriction of vehicles.	0..1	Dimension
	parkingSpace	Parking space	Properties of a single parking space. This aggregation may only be used with the "ParkingSpace" specialisation.	1..1	ParkingSpaceB asics
	prohibitedParking	Prohibited parking	Parking is not allowed for the given assignment.	0..1	ParkingAssignm ent
	responisbleAuthority	Responisble authority	Contact details of the responsible authority of the parking facility or parking area.	0..*	Contact

Class name	Role name	Designation	Definition	Multiplicity	Target
	securityService	Security service	Contact details of one or more security services of the parking facility.	0..*	Contact
	servicePartner	Service partner	Contact details of a service partner of the parking record, i.e. the person or organisation that should be contacted to provide servicing or support services for equipment at the parking.	0..*	Contact
ParkingRoute	parkingRouteColour	Parking route colour	A colour assigned to a parking route for visualisation purpose.	0..1	RGBColour
ParkingVMS	vmsOperator	VMS operator		0..*	Contact

Table G.16— Associations of the "ParkingRecord" package

## G.2.6.3 "ParkingRecord" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Contact	contactNotDefined	Contact not defined	When true, there is currently no contact defined for the selected role and/or timeframe. Don't use the specialisations in this case.	0..1	Boolean
	contactUnknown	Contact unknown	When true, the contact for the selected role and/or timeframe is unknown. Don't use the specialisations in this case.	0..1	Boolean
ContactByReference	contactReference	Contact reference	Contact information provided by a reference.	1..1	VersionedReference
ContactDetails	available24hours	Available24hours	Specifies if the availability is 24 hours a day. If omitted, this information is unknown or heterogeneous.	0..1	Boolean
	contactDetailsAddress	Contact details address	Complete address of the contact. Alternatively use the separate fields to describe the address.	0..1	MultilingualString
	contactDetailsCity	Contact details city	City of the contact.	0..1	MultilingualString

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	contactDetailsEMail	Contact details e mail	E-Mail address of the contact.	0..1	String
	contactDetailsFax	Contact details fax	Fax of the contact.	0..1	String
	contactDetailsHouseNumber	Contact details house number	House number of the contact. Supports a multiplicity up to two, to specify lower and upper numbers.	0..2	String
	contactDetailsLanguage	Contact details language	Language(s) this contact is able to speak resp. understand.	0..*	Language
	contactDetailsLogoUrl	Contact details logo url	Url to define a logo of this contact.	0..1	Url
	contactDetailsMoreInfo	Contact details more info	Additional information relating to the contact.	0..*	MultilingualString
	contactDetailsOwnership	Contact details ownership	Information if the contact in question is a private or public institution.	0..1	OwnershipTypeEnum
	contactDetailsPostcode	Contact details postcode	Postcode of the contact.	0..1	String
	contactDetailsResponsibility	Contact details responsibility	Specification of what service or equipment the contact is responsible for.	0..*	MultilingualString
	contactDetailsStreet	Contact details street	Street of the contact.	0..1	String
	contactDetailsTelephoneNumber	Contact details telephone number	Telephone Number of contact.	0..1	String
	contactOrganisationName	Contact organisation name	Name of the organisation or service. Do not use this attribute in combination with role "parkingSiteAddress".	0..1	MultilingualString
	contactPersonFirstName	Contact person first name	First name of the contact person.	0..1	String
	contactPersonName	Contact person name	Name of the contact person.	0..1	String
	contactPersonPosition	Contact person position	The position of the contact person.	0..1	MultilingualString
	country	Country	ISO 3166-1 two character country code.	0..1	CountryEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	publishingAgreement	Publishing agreement	Indication, whether the contact accepted publishing its contact information.	0..1	Boolean
	urlLinkAddress	URL link address	A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.	0..1	Url
ParkingRecord	maximumParkingDuration	Maximum parking duration	The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to avoid overnight parking).	0..1	Seconds
	parkingAlias	Parking alias	Alternative name for the parking site or the group of parking sites.	0..*	MultilingualString
	parkingDescription	Parking description	Additional description of the parking site or the group of parking sites.	0..1	MultilingualString
	parkingName	Parking name	Name of the parking, i.e. name of the parking site or the group of parking sites.	0..1	MultilingualString
	parkingNumberOfSpaces	Parking number of spaces	Number of parking spaces (attribute is used for a parking record as well as for a group of parking spaces).	0..1	NonNegativeInteger
	parkingOccupancyDetectionType	Parking occupancy detection type	Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if any (balancing, single slot, ... ).	0..*	OccupancyDetectionTypeEnum
	parkingPrincipalNumberOfSpaces	Parking principal number of spaces	Number of parking spaces that are not assigned for a particular purpose.	0..1	NonNegativeInteger
	parkingRecordVersionTime	Parking record version time	Date/time that this version of the parking record was defined.	1..1	DateTime
	photoUrl	Photo url	Specifies a URL at which a photo of the object in concern can be found.	0..1	Url

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	urlLinkAddress	URL link address	A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.	0..1	Url
ParkingRouteByReference	parkingRouteReference	Parking route reference	A reference to a parking route.	1..1	VersionedReference
ParkingRouteDetails	dynamicRouteManagement	Dynamic route management	Indicates that there is dynamic route management for truck parking, i.e. a management system concerning several truck parkings (including this one) along a route.	0..1	Boolean
	parkingRouteDirection	Parking route direction	The direction of traffic, for which the parking route can be used. If not specified, the route can be used in the order of the given locations.	0..1	DirectionEnum
	parkingRouteDirection2	Parking route direction2	Additional directions of traffic, for which the parking route can be used. If not specified, the route can be used in the order of the given locations.	0..1	ParkingRouteDirectionEnum
	parkingRouteIconIndex	Parking route icon index	An index, which can identify some icon for visualisation of the route. Note that form and usage of this index as well as the icons itself are not further determined here.	0..1	String
	parkingRouteName	Parking route name	Name of the parking route.	0..1	MultilingualString
	parkingRouteType	Parking route type	The type of parking route. If not specified, the route is designed for any type of vehicles.	0..1	ParkingRouteTypeEnum
ParkingStatusColourMapping	parkingSiteStatus	Parking site status	The status of the parking site (spaces available or not).	1..1	ParkingSiteStatusEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingThresholds	almostFullDecreasing	Almost full decreasing	The number of available spaces above which the state of the parking site is considered to change from 'almost full' to 'spaces available' as the parking site's occupancy decreases. Must be greater than 'almostFullIncreasing' value.	0..1	NonNegativeInteger
	almostFullIncreasing	Almost full increasing	The number of available spaces below which the state of the site is considered to change from 'spaces available' to 'almost full' as the site's occupancy increases. Must be lower or equal to 'almostFullDecreasing' and greater 'fullDecreasing'.	0..1	NonNegativeInteger
	entranceFull	Entrance full	The number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g. full sign is displayed at entrance or on managing VMS).	0..1	NonNegativeInteger
	fullDecreasing	Full decreasing	The number of available spaces above which the state of the parking site is considered to change from 'full' to 'almost full' as the site's occupancy decreases. Must be greater or equal to 'fullIncreasing' value and lower than 'almostFullIncreasing'.	0..1	NonNegativeInteger
	fullIncreasing	Full increasing	The number of available spaces below which the state of the parking site is considered to change from 'almost full' to 'full' as the site's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.	0..1	NonNegativeInteger

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	overcrowding	Overcrowding	The number of vehicles on the parking above which the overcrowding state of the parking site is considered to change to 'overcrowding'. Can be used as an alternative to the overcrowding level attributes.	0..1	NonNegativeInteger
	overcrowdingLevel1	Overcrowding level1	The number of vehicles on the parking site above which the overcrowding state of the parking site is considered to change from 'noOvercrowding' to 'overcrowdingLevel1'. Must be lower than the 'overcrowdingLevel2' value.	0..1	NonNegativeInteger
	overcrowdingLevel2	Overcrowding level2	The number of vehicles on the parking site above which the overcrowding state of the parking site is considered to change from 'overcrowdingLevel1' to 'overcrowdingLevel2'. Must be greater than the 'overcrowdingLevel1' value.	0..1	NonNegativeInteger
	parkingLastMaximumOccupancy	Parking last maximum occupancy	The last known occupancy (number of parking vehicles on the site) under safe conditions.	0..1	NonNegativeInteger
ParkingVMS	vmsUnitUsedToManageParking	VMS unit used to manage parking	A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the parking site (e.g. to indicate to drivers the current availability of spaces).	1..1	VersionedReference
PermitsAndProhibitions	activity	Activity	An activity, which is regulated.	1..1	RestAreaActivityEnum
	regulation	Regulation	Regulation for the specified activity.	1..1	RegulationEnum
RGBColour	colourName	Colour name	The name of the colour.	0..1	MultilingualString
	rgbBlueValue	Rgb blue value	The blue value of the RGB colour (0..255).	1..1	NonNegativeInteger



Class name	Attribute name	Designation	Definition	Multiplicity	Type
	rgbGreenValue	Rgb green value	The green value of the RGB colour (0..255).	1..1	NonNegativeInteger
	rgbRedValue	Rgb red value	The red value of the RGB colour (0..255).	1..1	NonNegativeInteger

Table G.17— Attributes of the "ParkingRecord" package

## G.2.7 "ParkingRecordStatus" package

### G.2.7.1 "ParkingRecordStatus" package classes

Class name	Designation	Definition	Stereotype	Abstract
GroupOfParkingSitesStatus	Group of parking sites status	Dynamic status information for the static object 'GroupOfParkingSites'.		no
GroupOfParkingSpacesStatus	Group of parking spaces status	The status of the assigned parking spaces in the specified parking site, i.e. the status of those spaces assigned for particular types of person or vehicle and/or for specific duration types (e.g. short stay).		no
ParkingAccessStatus	Parking access status	The opening and fault status of one access.		no
ParkingEquipmentOrServiceFacilityStatus	Parking equipment or service facility status	The number of E&S can be overridden here (for example during restoration). Furthermore, the current availability of E&S can be given (for example number of free electric charging stations). The E&S are identified from the static model by an index.		no
ParkingOccupancy	Parking occupancy	Parking capacity information for the parking site as well as for AssignedParkingSpaces.		no
ParkingRecordStatus	Parking record status	Contains the current status of one parking record defined in the static model (i.e. parking site or group of parking sites) or historical or forecasted data for one parking. Only for the second case, 'parkingStatusTime' must be specified.		yes
ParkingRouteStatus	Parking route status	The status of a parking route (active/inactive) defined in the static part of the model.		no
ParkingSiteStatus	Parking site status	Dynamic status information for the static object 'ParkingSite'.		no

Class name	Designation	Definition	Stereotype	Abstract
ParkingSpaceStatus	Parking space status	Status (occupied or closed) for a single parking space which was defined in the static part of the model.		no
ParkingStatusValidity	Parking status validity	To be used only for historical or forecasted data. Choose between an explicit point of time, an offset or all points of time within a specified period.		no
ParkingUsageScenario Status	Parking usage scenario status	The current status for this parking usage scenario.		no

**Table G.18— Classes of the "ParkingRecordStatus" package**

**G.2.7.2 "ParkingRecordStatus" package association roles**

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingRecordStatus	overrideParkingThresholds	Override parking thresholds	Possibility to override the thresholds for the parking, which are in principle defined in the static part of the model (ParkingStatusPublication).	0..1	ParkingThresholds
ParkingStatusValidity	validityTimeSpecification	Validity time specification	A specification of periods of validity defined by overall bounding start and end times and the possible intersection of valid periods with exception periods (exception periods overriding valid periods).	0..1	OverallPeriod

**Table G.19— Associations of the "ParkingRecordStatus" package**

**G.2.7.3 "ParkingRecordStatus" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GroupOfParkingSitesStatus	groupOfParkingSitesStatus	Group of parking sites status	The status of the group of parking sites (available spaces or not).	0..1	GroupOfParkingSitesStatusEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GroupOfParkingSpacesStatus	groupDeclarationValidNow	Group declaration valid now	Override validity of AssignedParkingSpaces: True = Parking space declaration is valid now; False = Parking space declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is valid).	0..1	Boolean
	groupOfParkingSpacesClosed	Group of parking spaces closed	True: The group of parking spaces is closed / not accessible. False or omitted: The group of parking spaces is accessible. This is no statement about its occupation.	0..1	Boolean
ParkingAccessStatus	accessFault	Access fault	A fault indicator for this special access.	0..*	ParkingFaultEnum
	accessOpeningStatus	Access opening status	The opening status of this access.	0..1	OpeningStatusEnum
	accessReference	Access reference	The reference to an access defined in the static part of the model.	1..1	Reference
ParkingEquipmentOrServiceFacilityStatus	equipmentOperationStatus	Equipment operation status	Specifies whether this equipment is available / is in operation or not.	0..1	OperationStatusEnum
	numberOfEquipmentOrServiceFacilityOverride	Number of equipment or service facility override	Overrides the static value 'numberOfEquipmentOrServiceFacility' (for example because of long- or midterm closures, such as renovation).	0..1	NonNegativeInteger
	numberOfSubitemsOverride	Number of subitems override	Overrides the static value 'numberOfSubitems' (for example because of long- or midterm closures, such as renovation).	0..1	NonNegativeInteger
	serviceFacilityOpeningStatus	Service facility opening status	Specifies whether this service facility is open or not.	0..1	OpeningStatusEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	vacantEquipmentOrServiceFacilitySubitems	Vacant equipment or service facility subitems	Sets the number of currently vacant elements of either equipment (e.g. free toilets) or service facility sub items (e.g. free restaurant places).	0..1	NonNegativeInteger
ParkingOccupancy	parkingNotAllowed	Parking not allowed	In case of 'true', parking is not allowed (e.g. abnormal closure).	0..1	Boolean
	parkingNumberOfOccupiedSpaces	Parking number of occupied spaces	The number of currently occupied spaces in the specified parking site, group of parking sites or assigned parking.	0..1	NonNegativeInteger
	parkingNumberOfSpacesOverride	Parking number of spaces override	Possibility to override the static value 'parkingNumberOfSpaces'.	0..1	NonNegativeInteger
	parkingNumberOfVacantSpaces	Parking number of vacant spaces	The total number of currently vacant parking spaces available in the specified parking site, group of parking sites or group of parking spaces.	0..1	NonNegativeInteger
	parkingNumberOfVacantSpacesGraded	Parking number of vacant spaces graded	Number of vacant spaces by grading (enumeration).	0..1	ParkingVacantSpacesEnum
	parkingNumberOfVacantSpacesHigherThan	Parking number of vacant spaces higher than	The number of vacant parking spaces is higher than the given value (example: More than 10 spaces are free).	0..1	NonNegativeInteger
	parkingNumberOfVacantSpacesLowerThan	Parking number of vacant spaces lower than	The number of vacant parking spaces is lower than the given value (example: Less than 10 spaces are free).	0..1	NonNegativeInteger
	parkingNumberOfVehicles	Parking number of vehicles	Number of vehicles (of specified type) on the parking site, the group of parking sites or the group of parking spaces. Parking too narrow or too wide may effect differences to the 'occupiedSpaces' value. Should not include petrol station traffic.	0..1	NonNegativeInteger
	parkingOccupancy	Parking occupancy	The percentage value of parking spaces occupied in the specified parking site, group of parking sites or assigned parking.	0..1	Percentage

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	parkingOccupancyGraded	Parking occupancy graded	Occupied parking spaces by a percentage-grading (enumeration).	0..1	ParkingOccupancyEnum
	parkingOccupancyTrend	Parking occupancy trend	The trend of the occupancy of the parking spaces in the specified parking site, group of parking sites or assigned parking.	0..1	ParkingOccupancyTrendEnum
ParkingRecordStatus	blurredAvailability	Blurred availability	When true, all information about availability (free spaces etc.) is blurred (usually because of business competition).	0..*	Boolean
	parkingConditions	Parking conditions	Defines if normal parking conditions are suspended or special parking conditions are in force.	0..1	ParkingConditionsEnum
	parkingFault	Parking fault	A fault indicator for the parking site.	0..*	ParkingFaultEnum
	parkingQueueingTime	Parking queueing time	The current queueing time (duration) for entering the parking site.	0..1	Seconds
	parkingRecordReference	Parking record reference	A reference to a static parking record object, i.e. a parking site or a group of parking sites.	1..1	VersionedReference
	parkingStatusDescription	Parking status description	Additional textual information about the parking status. Can also be used as an alternative in case the enumeration values for 'parkingSiteStatus' or 'groupOfParkingSitesStatus' do not fit.	0..1	MultilingualString
	parkingStatusOriginTime	Parking status origin time	The time when the information in this message was generated. Unless 'ParkingStatusValidity' is used, this is also the time the information in this message refers to.	1..1	DateTime
	winterEquipmentManagementType	Winter equipment management type	Type of winter equipment management action instigated by operator.	0..*	WinterEquipmentManagementTypeEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingRouteStatus	parkingRouteActive	Parking route active	Defines if this parking route is currently active or not.	1..1	Boolean
	parkingRouteReference	Parking route reference	A reference to a parking route.	1..1	VersionedReference
ParkingSiteStatus	parkingSiteFullAtFloor	Parking site full at floor	The parking site is full at the specified floor(s).	0..*	Integer
	parkingSiteOpeningStatus	Parking site opening status	The opening status of the parking site (open or not).	0..1	OpeningStatusEnum
	parkingSiteOvercrowdingStatus	Parking site overcrowding status	The overcrowding status of the parking site. Choose between using a two-stage approach or the more general statement '(not) overcrowding'. You can sharpen this information by using the 'Thresholds' component.	0..1	ParkingSiteOvercrowdingStatusEnum
	parkingSiteStatus	Parking site status	The status of the parking site (spaces available or not).	0..1	ParkingSiteStatusEnum
ParkingSpaceStatus	lastCalibration	Last calibration	Date of last calibration of the detection system in question.	0..1	DateTime
	measurementOrCalculationTime	Measurement or calculation time	Point in time at which this specific value or set of values has been measured or calculated. It may also be a future time at which a data value is predicted.	0..1	DateTime
	parkingSpaceClosed	Parking space closed	True: The parking space is closed / not accessible. False or omitted: The parking space is accessible. This is no statement about its occupation.	0..1	Boolean
	parkingSpaceDeclarationValidNow	Parking space declaration valid now	Override validity of 'ParkingSpace': True = Parking space declaration is valid now; False = Parking space declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is valid).	0..1	Boolean

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	parkingSpaceOccupied	Parking space occupied	True: Parking space is occupied; False: Parking space is free.	1..1	Boolean
ParkingStatusValidity	parkingStatusTime	Parking status time	Only use for forecasts or historical data to express the point of time for which the information of this parking is either reported or forecasted. Alternately you can define this point of time as an offset with 'parkingStatusTimeOffsetToOrigin'.	0..1	DateTime
	parkingStatusTimeOffsetToOrigin	Parking status time offset to origin	Only use for forecasts or historical data to express the point of time for which the information of this parking is either reported or forecasted (in form of an offset in seconds to 'parkingStatusOriginTime'; use negative values for historical data).	0..1	Seconds
ParkingUsageScenarioStatus	usageScenarioOperationStatus	Usage scenario operation status	The current status for this parking usage scenario.	1..1	OperationStatus Enum

Table G.20— Attributes of the "ParkingRecordStatus" package

## G.2.8 "ParkingSite" package

### G.2.8.1 "ParkingSite" package classes

Class name	Designation	Definition	Stereotype	Abstract
InterUrbanParkingSite	Inter urban parking site	A parking site in an interurban context.		no
ParkingSite	Parking site	A record containing static details of a parking site. Must be specialised as an 'Urban-' or 'InterUrbanParkingSite' or a 'SpecialLocationParkingSite'.		yes
ParkingUsageScenario	Parking usage scenario	A special type of usage available for the parking site or the group of parking spaces. In the 'ParkingStatusPublication', the operation type (in operation or not) can be defined.		no
SpecialLocationParkingSite	Special location parking site	A parking site which is located at a special location, often associated with some building.		no

Class name	Designation	Definition	Stereotype	Abstract
UrbanParkingSite	Urban parking site	A parking site in an urban context.		no

Table G.21— Classes of the "ParkingSite" package

## G.2.8.2 "ParkingSite" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingSite	parkingSiteAddress	Parking site address	Information about the parking site itself (address etc.). The 'GroupOfLocations' association must not be used for this role.	0..*	Contact
	reservationService	Reservation service	Reservation service (for end users). It is recommended to give URL and telephone.	0..*	Contact
ParkingUsageScenario	scenarioAvailability	Scenario availability		0..1	OverallPeriod

Table G.22— Associations of the "ParkingSite" package

## G.2.8.3 "ParkingSite" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
InterUrbanParkingSite	interUrbanParkingSiteLocation	Inter urban parking site location	Defines whether the interurban parking site is located in or nearby a motorway context, is a layby or on-street parking.	1..1	InterUrbanParkingSiteLocationEnum
ParkingSite	highestFloor	Highest floor	Highest floor of the parking site. It is possible to have negative values here in case it is underground only. Must be higher or equal than 'lowestFloor'.	0..1	Integer
	lowestFloor	Lowest floor	Lowest floor of the parking site. Positive values may apply in case it is over ground only. Must be lower or equal than 'highestFloor'.	0..1	Integer
	parkingLayout	Parking layout	Layout of the parking site.	0..*	ParkingLayoutEnum
	parkingReservation	Parking reservation	Indication of whether a parking reservation service is available and/or mandatory.	0..1	ReservationTypeEnum



Class name	Attribute name	Designation	Definition	Multiplicity	Type
	temporaryParking	Temporary parking	Indicates that the parking site is on a temporary basis. It might close permanently within short notice or might only be partial equipped. The physical parking possibilities might be provisional, too.	0..1	Boolean
ParkingUsageScenario	eventParkingType	Event parking type	Parking associated with an event. May only be used for parking scenario 'eventParking'.	0..1	PublicEventTypeEnum
	eventParkingType2	Event parking type2	Parking associated with an event. May only be used for parking scenario 'eventParking'.	0..1	PublicEventType2Enum
	parkingUsageScenario	Parking usage scenario	A special type of usage available for the parking site or a group of parking spaces. In the 'ParkingStatusPublication', the operation type (in operation or not) can be defined.	1..1	ParkingUsageScenarioEnum
	truckParkingDynamicManagement	Truck parking dynamic management	Two modes for parking lorries in a efficient way according to their departure times. May only be used for parking scenario 'truckParking'.	0..*	TruckParkingDynamicManagementEnum
SpecialLocationParkingSite	parkingOtherSpecialLocation	Parking other special location	A special location not available in the enumeration. Use literal 'other' in this case.	0..1	MultilingualString
	parkingSpecialLocation	Parking special location	The special location of the parking site.	1..1	ParkingSpecialLocationEnum
UrbanParkingSite	parkingZone	Parking zone	Name or identifier of a parking zone this parking site belongs to. To be filled with the string value 'True', if there is a parking zone with unknown name.	0..1	MultilingualString
	urbanParkingSiteType	Urban parking site type	The type of urban parking site.	1..1	UrbanParkingSiteTypeEnum

Table G.23— Attributes of the "ParkingSite" package

## G.2.9 "ParkingSpace" package

## G.2.9.1 "ParkingSpace" package classes

Class name	Designation	Definition	Stereotype	Abstract
Dimension	Dimension	A component that provides dimension information. The product of width and height must not be necessarily be the square footage (e.g. in multi-storey buildings or when some zones are not part of the square footage).		no
GroupOfParkingSpaces	Group of parking spaces	A group of parking spaces. All information provided has to be identical for all places in this group. Can also be used just to give the number of lorry parkings, for example. 'GroupOfParkingSpaces' may be multiple defined or include each other.		no
ParkingSpace	Parking space	A single parking space. It is possible to define the same parking space more than once with different properties, e.g. when there is a different parking assignment for different times.		no

Table G.24— Classes of the "ParkingSpace" package

## G.2.9.2 "ParkingSpace" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
GroupOfParkingSpaces	dimensionOfGroup	Dimension of group	Dimension of a virtual rectangle encapsulating the group of parking spaces. Use 'dimensionUsableArea' to define the total space available for parking within this group. Do not use 'dimensionHeight'.	0..1	Dimension
	maximumParkingSpaceDimension	Maximum parking space dimension	Dimension of the largest space within this group (i.e. there must be at least one space of this dimension). If the comparison of dimension values is not unique, the length is decisive.	0..1	Dimension

Class name	Role name	Designation	Definition	Multiplicity	Target
	minimumParkingSpaceDimension	Minimum parking space dimension	Lower dimension boundaries for all spaces within the group. Note that there must not exist a space with this dimension, but each space's dimension values must be equal or higher.	0..1	Dimension
ParkingSpace	parkingSpaceDimension	Parking space dimension	Dimension of the parking space (not all dimension attributes need to be provided). If the parking space is not rectangular, its dimension is specified as the smallest rectangle fitting inside its shape.	0..1	Dimension

Table G.25— Associations of the "ParkingSpace" package

## G.2.9.3 "ParkingSpace" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Dimension	dimensionHeight	Dimension height	Height.	0..1	MetresAsFloat
	dimensionLength	Dimension length	Length.	0..1	MetresAsFloat
	dimensionUsableArea	Dimension usable area	The area measured in square metres, that is available for some specific purpose.	0..1	SquareMetres
	dimensionWidth	Dimension width	Width.	0..1	MetresAsFloat
GroupOfParkingSpaces	identicalToGroup	Identical to group	Points to another instance of 'GroupOfParkingSpaces', which is identical from a local point of view. To be used when defining mixed parking areas with different time slots.	0..*	IndexReference
	parkingNumberOfSpaces	Parking number of spaces	Number of parking spaces (attribute is used for a parking record as well as for a group of parking spaces).	1..1	NonNegativeInteger
	parkingTypeOfGroup	Parking type of group	Defines the type of this group specification.	1..1	ParkingTypeOfGroup

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	realSubsetOfGroup	Real subset of group	Points to another instance of 'GroupOfParkingSpaces', which is a real superset from a local point of view. To be used when defining mixed parking areas with different time slots.	0..*	IndexReference
ParkingSpace	identicalToParkingSpace	Identical to parking space	Points to another instance of 'ParkingSpace', which is identical from a local point of view (i.e. which is the same parking space). To be used when defining mixed parking areas (with using different time slots).	0..*	IndexReference

Table G.26— Attributes of the "ParkingSpace" package

### G.2.10 "ParkingSpaceBasics" package

#### G.2.10.1 "ParkingSpaceBasics" package classes

Class name	Designation	Definition	Stereotype	Abstract
DedicatedAccess	Dedicated access	Reference to an access of any type (vehicles, pedestrian, ...).		no
ParkingAssignment	Parking assignment	One set of prohibited/only allowed/convenient assignment for parking space(s), parking site(s) or an access. Same kind of data forms a union (e.g. lorries OR buses), different kind of data forms an intersection (e.g. residents AND long-term).		no
ParkingPermit	Parking permit	A permission for parking.		no
ParkingSpaceBasics	Parking space basics	Common properties of parking spaces and groups of parking spaces.		yes

Table G.27— Classes of the "ParkingSpaceBasics" package

#### G.2.10.2 "ParkingSpaceBasics" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingSpaceBasics	assignedParkingAmongOthers	Assigned parking among others	Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for this kind of assignment.	0..1	ParkingAssignment
	onlyAssignedParking	Only assigned parking	Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of attributes.	0..1	ParkingAssignment
	prohibitedParking	Prohibited parking	Parking is not allowed for the given assignment.	0..1	ParkingAssignment

Table G.28— Associations of the "ParkingSpaceBasics" package

## G.2.10.3 "ParkingSpaceBasics" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
DedicatedAccess	dedicatedAccess	Dedicated access	Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further characteristics can be specified for those objects.	1..1	Reference
	distanceFromParkingSpace	Distance from parking space	Distance from this access to the parking space or group of parking spaces. Especially interesting for handicapped people on the one hand or in case of the need of changing the side of a motorway.	0..1	MetresAsNonNegativeInteger
ParkingAssignment	applicableForUser	Applicable for user	Limitation to a set of special users.	0..*	UserTypeEnum
	parkingDuration	Parking duration	Temporal parking classification for this assignment (long term, short term, ...). Depending on the used role, these classifications are either assigned or prohibited.	0..*	ParkingDurationEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingPermit	parkingPermitIdentifier	Parking permit identifier	Identifier of permission for parking.	0..1	String
	parkingPermitScheme	Parking permit scheme	Scheme of permission for parking.	0..1	String
	parkingPermitType	Parking permit type	Type of permission for parking.	1..1	PermitTypeEnum
ParkingSpaceBasics	accessibility	Accessibility	Information on accessibility, easements and marking for handicapped people.	0..*	AccessibilityEnum
	distanceFromPrimaryRoad	Distance from primary road	Specifies the distance from the primary road in metres. Especially useful, if parking is located on a smaller type of road.	0..1	MetresAsNonNegativeInteger
	maximumParkingDuration	Maximum parking duration	The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to avoid overnight parking).	0..1	Seconds
	parkingFloorOrLevel	Parking floor or level	The floor or level of the parking site on which the assigned parking spaces are located.	0..1	Integer
	parkingMode	Parking mode	The arrangement of the parking space or the group of parking spaces in relation to the road.	0..1	ParkingModeEnum
	parkingOccupancyDetectionType	Parking occupancy detection type	Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if any (balancing, single slot, ... ).	0..*	OccupancyDetectionTypeEnum
	parkingReservation	Parking reservation	Indication of whether a parking reservation service is available and/or mandatory.	0..1	ReservationTypeEnum
	parkingSecurity	Parking security	Specifies security measures related to the parking site or particular spaces.	0..*	ParkingSecurityEnum
	parkingSpaceAccessibility	Parking space accessibility	Further easements for handicapped people related to this parking space or this group of parking spaces.	0..*	ParkingSpaceAccessibilityEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	parkingSpaceOrGroupIdentifier	Parking space or group identifier	A public identifier or short description for the parking space or group of parking spaces, for example "6D" or "Truck parking west".	0..1	MultilingualString
	parkingSpacePhysics	Parking space physics	Specifies 'driveThrough' or 'openAir' for the parking space or the group of parking spaces.	0..2	ParkingSpacePhysicsEnum

Table G.29— Attributes of the "ParkingSpaceBasics" package

## G.2.11 "ParkingStandardsAndSecurity" package

### G.2.11.1 "ParkingStandardsAndSecurity" package classes

Class name	Designation	Definition	Stereotype	Abstract
ParkingStandardsAndSecurity	Parking standards and security	Security measures and standards or standard-like categorization for a parking site.		no

Table G.30— Classes of the "ParkingStandardsAndSecurity" package

### G.2.11.2 "ParkingStandardsAndSecurity" package association roles

There are no defined association roles in the "ParkingStandardsAndSecurity" package.

### G.2.11.3 "ParkingStandardsAndSecurity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingStandardsAndSecurity	certifiedSecureParking	Certified secure parking	Presence of a certification for secure parking.	0..1	Boolean
	dateOfCertification	Date of certification	Date of certification.	0..1	Date
	labelSecurityLevel	Label security level	Formal assessment for the security level defined by the LABEL project <a href="http://truckparkinglabel.eu">http://truckparkinglabel.eu</a> .	0..1	LABELSecurityLevelEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	labelSecurityLevelSelfAssessment	Label security level self assessment	Self-assessment for the security level defined by the LABEL project <a href="http://truckparkinglabel.eu">http://truckparkinglabel.eu</a> .	0..1	LABELSecurityLevelEnum
	labelServiceLevel	Label service level	Formal assessment for the service level defined by the LABEL project <a href="http://truckparkinglabel.eu">http://truckparkinglabel.eu</a> .	0..1	LABELServiceLevelEnum
	labelServiceLevelSelfAssessment	Label service level self assessment	Self-assessment for the service level defined by the LABEL project <a href="http://truckparkinglabel.eu">http://truckparkinglabel.eu</a> .	0..1	LABELServiceLevelEnum
	parkingAdditionalSecurity	Parking additional security	Security equipment of the parking site that is not covered by the enumeration 'ParkingSecurityEnum'.	0..*	MultilingualString
	parkingSecurity	Parking security	Specifies security measures related to the parking site or particular spaces.	0..*	ParkingSecurityEnum
	parkingSecurityNationalClassification	Parking security national classification	A national classification of the parking security.	0..1	MultilingualString
	parkingSupervision	Parking supervision	Defines the kind of supervision of the parking site.	0..*	ParkingSupervisionEnum

Table G.31— Attributes of the "ParkingStandardsAndSecurity" package

## G.2.12 "ParkingStatusPublication" package

### G.2.12.1 "ParkingStatusPublication" package classes

Class name	Designation	Definition	Stereotype	Abstract
ParkingStatusPublication	Parking status publication	A publication containing the current status of one or more parking sites and/or group of parking sites.		no

Table G.32— Classes of the "ParkingStatusPublication" package

### G.2.12.2 "ParkingStatusPublication" package association roles

There are no defined association roles in the "ParkingStatusPublication" package.



### G.2.12.3 "ParkingStatusPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingStatusPublication	parkingTableReference	Parking table reference	It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables here.	0..*	VersionedReference

Table G.33— Attributes of the "ParkingStatusPublication" package

### G.2.13 "ParkingTablePublication" package

#### G.2.13.1 "ParkingTablePublication" package classes

Class name	Designation	Definition	Stereotype	Abstract
GroupOfParkingSites	Group of parking sites	A logical composition of parking sites with aggregated properties (e.g. number of spaces). Examples: Urban parking area "West" or all truck parkings along a motorway. The included parking sites may - but must not- be specified as subcomponents.		no
ParkingTable	Parking table	A collection of parking records, which can be parking sites or groups of parking sites.	versionedIdentifiable	no
ParkingTablePublication	Parking table publication	A publication defining one or more tables that have entries of parking sites or groups of them, located in an urban or interurban context.		no

Table G.34— Classes of the "ParkingTablePublication" package

#### G.2.13.2 "ParkingTablePublication" package association roles

There are no defined association roles in the "ParkingTablePublication" package.

#### G.2.13.3 "ParkingTablePublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GroupOfParkingSites	groupOfParkingSitesType	Group of parking sites type	The type of this group of parking sites.	0..1	GroupOfParkingSitesTypeEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	parkingSiteByReference	Parking site by reference	Parking sites of this collection defined by reference.	0..*	VersionedReference
ParkingTable	parkingTableName	Parking table name	The name of the parking table.	0..1	MultilingualString
	parkingTableVersionTime	Parking table version time	The date/time that this version of the parking table was defined by the supplier. The identity and version of the table are defined by the class stereotype implementation.	1..1	DateTime

Table G.35— Attributes of the "ParkingTablePublication" package

G.2.14 "ParkingVehicleCountAndRate" package

G.2.14.1 "ParkingVehicleCountAndRate" package classes

Class name	Designation	Definition	Stereotype	Abstract
VehicleCountAndRate	Vehicle count and rate	Vehicle rates can be assigned to a parking site or to assigned parking spaces. Furthermore, they can reference to a measurement site or to an entrance/exit.		no
VehicleCountWithinInterval	Vehicle count within interval	Gives incoming and/or outgoing vehicles and/or change of occupied spaces within a given interval. The interval is given in positive or negative seconds related to 'measurementOrCalculationTime' or 'measurementDefaultTime'.		no
VehicleRate	Vehicle rate	Gives information about fill and exit rates OR vehicle flow rate (without direction). If the time stamp is omitted, 'measurementTimeDefault' is used.		no

Table G.36— Classes of the "ParkingVehicleCountAndRate" package

G.2.14.2 "ParkingVehicleCountAndRate" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
VehicleCountWithinInterval	changeOfOccupiedSpaces	Change of occupied spaces	The change in the number of occupied spaces for specified vehicles within the given interval. Negative values mean less occupied spaces than at the beginning of the interval.	0..1	OccupancyChangeValue
	countedVehicles	Counted vehicles		0..1	VehicleCharacteristics
	numberOfIncomingVehicles	Number of incoming vehicles	Number of vehicles of specified type that entered the specified parking within the given interval.	0..1	VehicleCountValue
	numberOfOutgoingVehicles	Number of outgoing vehicles	Number of vehicles of specified type that left the specified parking within the given interval.	0..1	VehicleCountValue
VehicleRate	exitRate	Exit rate	The rate at which vehicles are exiting the parking.	0..1	VehicleFlowValue
	fillRate	Fill rate	The rate at which vehicles are entering the parking.	0..1	VehicleFlowValue
	measuredVehicles	Measured vehicles		0..1	VehicleCharacteristics
	vehicleFlowRate	Vehicle flow rate	A value of vehicle flow rate expressed in vehicles per hour.	0..1	VehicleFlowValue

Table G.37— Associations of the "ParkingVehicleCountAndRate" package

## G.2.14.3 "ParkingVehicleCountAndRate" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
VehicleCountAndRate	coveringPetrolStationArea	Covering petrol station area	Indication, if this detector also covers the area of a petrol station.	0..1	Boolean
	dedicatedAccess	Dedicated access	Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further characteristics can be specified for those objects.	0..1	Reference

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	lastCalibration	Last calibration	Date of last calibration of the detection system in question.	0..1	DateTime
	measuredValueIndex	Measured value index	If a measurement site is specified, the index of the measured value can be specified here.	0..1	NonNegativeInteger
	measurementSiteReference	Measurement site reference	A reference to a versioned measurement site record defined in a Measurement Site table.	0..1	VersionedReference
	measurementTimeDefault	Measurement time default	The time associated with the set of measurements. It may be the time of the beginning, the end or the middle of the measurement period.	0..1	DateTime
VehicleCountWithinInterval	measurementInterval	Measurement interval	Interval for which the data applies. Usually, this value should be negative. Example: -300 = last 5 minutes up to 'measurementOrCalculationTime' or 'measurementTimeDefault'. Use a positive value only for predictions. Example: 600 = next ten minutes.	1..1	Seconds
	measurementOrCalculationTime	Measurement or calculation time	Point in time at which this specific value or set of values has been measured or calculated. It may also be a future time at which a data value is predicted.	0..1	DateTime
VehicleRate	measurementOrCalculationTime	Measurement or calculation time	Point in time at which this specific value or set of values has been measured or calculated. It may also be a future time at which a data value is predicted.	0..1	DateTime

Table G.38— Attributes of the "ParkingVehicleCountAndRate" package

**G.2.15 "ParkingVehiclesPublication" package**

**G.2.15.1 "ParkingVehiclesPublication" package classes**

Class name	Designation	Definition	Stereotype	Abstract
IndividualCharge	Individual charge	Information on the individual charge for parking the specified vehicle.		no
ParkingVehicle	Parking vehicle	Information about one individual parking vehicle.	versionedIdentifiable	no
ParkingVehiclesPublication	Parking vehicles publication	Information about individual parking vehicles.		no
UsedPaymentCard	Used payment card	The used payment card for this parking vehicle.		no

Table G.39— Classes of the "ParkingVehiclesPublication" package

## G.2.15.2 "ParkingVehiclesPublication" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingVehicle	parkingPeriod	Parking period		0..1	OverallPeriod

Table G.40— Associations of the "ParkingVehiclesPublication" package

## G.2.15.3 "ParkingVehiclesPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
IndividualCharge	chargeBandReference	Charge band reference	A reference to a charge band.	0..1	VersionedReference
	chargeCurrency	Charge currency	A three-character code according to ISO 4217 for the currency in which the parking charge is specified (e.g. EUR, GBP, SEK, CZK).	0..1	CurrencyEnum
	chargePaid	Charge paid	The charge paid for this vehicle. If the vehicle is still parking, it's the charge amount accumulated so far.	1..1	AmountOfMoney
	usedMeansOfPayment	Used means of payment	The payment method used to pay for this parking vehicle. If it is 'paymentCard', use 'UsedPaymentCard' to specify more details.	0..1	MeansOfPaymentEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	withReservation	With reservation	Specifies, whether there was a reservation made for this vehicle.	0..1	Boolean
ParkingVehicle	groupOfParkingSpacesReference	Group of parking spaces reference	Points to one or more groups of parking spaces, to which the parking space of the vehicle belongs. The reference is only unique in combination with 'parkingRecordReference'.	0..*	IndexReference
	parkingRecordReference	Parking record reference	A reference to a static parking record object, i.e. a parking site or a group of parking sites.	1..1	VersionedReference
	parkingSpaceReference	Parking space reference	Points to the parking space, on which the vehicle is located. The reference is only unique in combination with 'parkingRecordReference'.	0..1	IndexReference
ParkingVehiclesPublication	parkingTableReference	Parking table reference	It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables here.	0..*	VersionedReference
UsedPaymentCard	otherPaymentCard	Other payment card	The payment card used for this parking vehicle in case the paymentCard attribute is set to 'other'.	0..1	String
	otherPaymentCardBrand	Other payment card brand	The payment card brand used for this parking vehicle in case the paymentCardBrand attribute is set to 'other'.	0..1	String
	paymentCard	Payment card	Use this class to describe details in case usedMeansOfPayment is set to 'paymentCard'.	1..1	PaymentCardTypesEnum
	paymentCardBrand	Payment card brand	The payment card brand used for this parking vehicle.	0..1	PaymentCardBrandsEnum

Table G.41— Attributes of the "ParkingVehiclesPublication" package

G.2.16 "PolygonArea" package

**G.2.16.1 "PolygonArea" package classes**

Class name	Designation	Definition	Stereotype	Abstract
AreaExtended	Area extended	Extension class for area used in parking publication extension.		no
NamedArea	Named area	An area defined by a name and/or in terms of known boundaries, such as country or county boundaries or allocated control area of particular authority. The attributes do not form a union; instead, the smallest intersection forms the resulting area.		no
PolygonArea	Polygon area	defines points for a closed polygon-shape describing the area		no

**Table G.42— Classes of the "PolygonArea" package****G.2.16.2 "PolygonArea" package association roles**

There are no defined association roles in the "PolygonArea" package.

**G.2.16.3 "PolygonArea" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
NamedArea	areaName	Area name	Name of an area.	0..1	MultilingualString
	country	Country	ISO 3166-1 two character country code.	0..1	CountryEnum
	county	County	Name of a county (administrative sub-division).	0..1	MultilingualString
	nation	Nation	Name of a nation (e.g. Wales) which is a sub-division of an ISO recognised country.	0..1	MultilingualString
	policeForceControlArea	Police force control area	Name of a police force area.	0..1	MultilingualString
	roadOperatorControlArea	Road operator control area	Name of a road operator control area.	0..1	MultilingualString
PolygonArea	sectionName	Section name	Name of the polygon area. Especially useful when the area consists of more than one polygon.	0..1	MultilingualString

Table G.43— Attributes of the "PolygonArea" package

## G.2.17 "Road" package

## G.2.17.1 "Road" package classes

Class name	Designation	Definition	Stereotype	Abstract
Road	Road	Identification of a road by its name, identifier, type ...		no
RoadNode	Road node	A road node as part of the specialised road identified by the name of a junction on this road.		no

Table G.44— Classes of the "Road" package

## G.2.17.2 "Road" package association roles

There are no defined association roles in the "Road" package.

## G.2.17.3 "Road" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Road	distanceToThisRoad	Distance to this road	Distance to the road in metres (from the calling component/object).	0..1	MetresAsNonNegativeInteger
	nameOfRoad	Name of road	The name of the road.	0..1	MultilingualString
	roadDestination	Road destination	Name of some city, area, compass direction or other identification the road is leading to (to determine the direction in question).	0..*	MultilingualString
	roadIdentifier	Road identifier	Identifier/number of the road.	0..1	MultilingualString
	roadOrigination	Road origination	Name of some city, area, compass direction or other identification this road comes from.	0..*	MultilingualString
	typeOfRoad	Type of road	Type of the road.	0..1	RoadTypeEnum



Class name	Attribute name	Designation	Definition	Multiplicity	Type
RoadNode	junctionName	Junction name	Name of the junction.	1..1	MultilingualString

Table G.45— Attributes of the "Road" package

## G.2.18 "TariffsAndPayment" package

### G.2.18.1 "TariffsAndPayment" package classes

Class name	Designation	Definition	Stereotype	Abstract
AcceptedPaymentCards	Accepted payment cards	Use this class to describe details in case acceptedMeansOfPayment is set to 'paymentCard'.		no
Charge	Charge	A particular charge for a specified interval belonging a charge band.		no
ChargeBand	Charge band	A charge band in accordance with the specified conditions, possibly up to a maximum duration, during a specified period and for a vehicle of specified characteristics (in case of parking).	versionedIdentifiable	no
ChargeBandByReference	Charge band by reference	Using (a) prior defined charge band(s), identified by its reference.		no
TariffsAndPayment	Tariffs and payment	A table of charges under various conditions, primary used for parking.		no

Table G.46— Classes of the "TariffsAndPayment" package

### G.2.18.2 "TariffsAndPayment" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ChargeBand	applicableForPeriod	Applicable for period	Charge band limitation on a (complex) period, described by the validity model.	0..1	OverallPeriod
	applicableForVehicles	Applicable for vehicles	Charge band limitation on a set of vehicles described by their characteristics.	0..*	VehicleCharacteristics

Table G.47— Associations of the "TariffsAndPayment" package

### G.2.18.3 "TariffsAndPayment" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
AcceptedPaymentCards	otherPaymentCardBrands	Other payment card brands	Further accepted brands of payment cards.	0..*	String
	otherPaymentCards	Other payment cards	Further accepted payment cards.	0..*	String
	paymentCardBrands	Payment card brands	List of accepted brands for payment cards.	0..*	PaymentCardBrandsEnum
	paymentCards	Payment cards	List of accepted payment cards.	1..*	PaymentCardTypesEnum
Charge	charge	Charge	Charge for the specified interval (for vehicle of defined characteristics, if any specified) up to the maximum defined duration and during the defined period(s).	1..1	AmountOfMoney
	chargeInterval	Charge interval	Interval for which the charge applies (e.g. charge applies for 2 hours (to specify in seconds)). If no interval is specified, the price is valid for the whole period (kind of flat fee).	0..1	Seconds
	chargeOrderIndex	Charge order index	A non-unique index which forms an order for applying charges, i.e. a charge may never be applied afterwards a charge with a higher index. For same indices there is no order-restriction. You can skip charges unless their 'minIterationsOfCharge' is not > 0.	0..1	NonNegativeInteger
	chargeType	Charge type	The type of charge. Day- week- month- and year-charges can be specified without this enumeration by specifying the interval.	0..1	ChargeTypeEnum
	chargeTypeDescription	Charge type description	Additional description for this kind of charge type, especially if the enumeration does not fit.	0..1	MultilingualString

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	maxIterationsOfCharge	Max iterations of charge	This charge must not be applied more often within this charge band than specified in this attribute. Thus it is possible to specify the first hour for free, for example.	0..1	NonNegativeInteger
	minIterationsOfCharge	Min iterations of charge	This charge must be applied within this charge band at least as often as specified in this attribute. Thus it is possible to specify the first hour in an expensive manner, for example.	0..1	NonNegativeInteger
ChargeBand	applicableForUser	Applicable for user	Limitation to a set of special users.	0..*	UserTypeEnum
	chargeBandName	Charge band name	Name for this charge band.	0..1	MultilingualString
	chargeCurrency	Charge currency	A three-character code according to ISO 4217 for the currency in which the parking charge is specified (e.g. EUR, GBP, SEK, CZK).	1..1	CurrencyEnum
	maximumDuration	Maximum duration	The maximum duration (e.g. of parking) for which the specified charge is applicable.	0..1	Seconds
ChargeBandByReference	chargeBandReference	Charge band reference	A reference to a charge band.	1..1	VersionedReference
TariffsAndPayment	acceptedMeansOfPayment	Accepted means of payment	Method(s) by which the user can make payments. In case of 'paymentCard' use AcceptedPaymentCards to specify more details.	0..*	MeansOfPaymentEnum
	freeOfCharge	Free of charge	No fee at all. In this case, no further elements of the tariffs structure are needed.	0..1	Boolean
	lastUpdated	Last updated	The date/time at which this information was last updated.	0..1	DateTime

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	paymentAdditionalDescription	Payment additional description	Additional description, for instance instructions or telephone number for paying by SMS.	0..1	MultilingualString
	paymentMode	Payment mode	Modes how to realize the payment ('payAndDisplay', 'payByPrepaidToken', ...).	0..*	ParkingPaymentModeEnum
	reservationFee	Reservation fee	A fee for reservation, if this is uniform for all situations. Can also be 0 to indicate free reservations. This attribute does not indicate if reservation is available at all and/or mandatory.	0..1	AmountOfMoney
	urlLinkAddress	URL link address	A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.	0..1	Url

**Table G.48— Attributes of the "TariffsAndPayment" package**

**G.2.19 "VehicleCharacteristicsExtension" package**

**G.2.19.1 "VehicleCharacteristicsExtension" package classes**

Class name	Designation	Definition	Stereotype	Abstract
VehicleCharacteristicsExtended	Vehicle characteristics extended	Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel types, load types etc.		no

**Table G.49— Classes of the "VehicleCharacteristicsExtension" package**

**G.2.19.2 "VehicleCharacteristicsExtension" package association roles**

There are no defined association roles in the "VehicleCharacteristicsExtension" package.

**G.2.19.3 "VehicleCharacteristicsExtension" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
VehicleCharacteristicsExtended	emissionClassification	Emission classification	The valid list of entries for this attribute has to be specified between the communication-partners. Usually it's some country specific classification code for emissions, which must be scored by vehicles to be valid.	0..*	String
	fuelType2	Fuel type2	Fuel types currently not supported in 'FuelTypeEnum'.	0..1	FuelType2Enum
	loadType2	Load type2	Loads currently not supported in 'LoadTypeEnum'.	0..1	LoadType2Enum
	operationFreeOfEmission	Operation free of emission	Only vehicles that do not produce emissions (e.g. electric driven). Hybrid driven cars are allowed, when they switch to emission free mode within the considered situation.	0..1	Boolean
	vehicleType2	Vehicle type2	Vehicle types currently not supported in 'VehicleTypeEnum'.	0..1	VehicleType2Enum
	vehicleUsage2	Vehicle usage2	Usage types currently not supported in 'VehicleUsageTypeEnum'.	0..1	VehicleUsage2Enum

Table G.50— Attributes of the "VehicleCharacteristicsExtension" package

### **G.3 Data Dictionary of <<datatype>> for "Parking Publications"**

This clause contains the definitions of all data types which are used in the "Parking Publications".

#### **G.3.1 The <<datatype>> "AmountOfMoney"**

A monetary value expressed to two decimal places.

#### **G.3.2 The <<datatype>> "Ampere"**

Ampere.

#### **G.3.3 The <<datatype>> "Decimal"**

A decimal number whose value space is the set of numbers that can be obtained by multiplying an integer by a non-positive power of ten, i.e., expressible as  $i \times 10^{-n}$  where  $i$  and  $n$  are integers and  $n \geq 0$ .

#### **G.3.4 The <<datatype>> "IndexReference"**

A reference to an object given by its index qualifier.

#### **G.3.5 The <<datatype>> "SquareMetres"**

Square metres.

#### **G.3.6 The <<datatype>> "Volt"**

Volt.

## G.4 Data Dictionary of <<enumerations>> for "Parking Publications"

This clause contains the definitions of all enumerations which are used in the "Parking Publications".

### G.4.1 The <<enumeration>> "AccessCategoryEnum"

Specifies the category of the access.

Enumerated value name	Designation	Definition
bicycles	Bicycles	An access for bicycles.
emergencyExit	Emergency exit	An exit that can be used by pedestrians in case of emergency (i.e. among others easy to access and signed).
other	Other	Other.
pedestrianEntrance	Pedestrian entrance	An entrance for pedestrian.
pedestrianEntranceAndExit	Pedestrian entrance and exit	An entrance and exit for pedestrian.
pedestrianExit	Pedestrian exit	An exit for pedestrian.
rentalCarReturn	Rental car return	An entrance to return rental cars.
unknown	Unknown	Unknown.
unspecified	Unspecified	The category of this access is not specified any further.
vehicleEntrance	Vehicle entrance	An entrance for vehicles.
vehicleEntranceAndExit	Vehicle entrance and exit	An entrance and exit for vehicles.
vehicleExit	Vehicle exit	An exit for vehicles.

Table G.51— Values contained in the enumeration "AccessCategoryEnum"

### G.4.2 The <<enumeration>> "AccessEquipmentEnum"

Specifies additional equipment for this access.

Enumerated value name	Designation	Definition
barrier	Barrier	There is a barrier on this entrance or exit. Usually access is granted through tickets, buttons or electronic systems.
other	Other	Other.
payAndExitMachine	Pay and exit machine	A machine at this exit enables payment directly by inserting a payment or identity card.
ticketButtonMachine	Ticket button machine	A machine at this entrance provides a parking ticket by pressing a button.
ticketCardMachine	Ticket card machine	A machine at this entrance provides a parking ticket by inserting some payment or identity card.
trafficSignal	Traffic signal	There is a traffic signal installation controlling this access.

Table G.52— Values contained in the enumeration "AccessEquipmentEnum"

### G.4.3 The <<enumeration>> "AccessibilityEnum"

Special forms of accessibility, easements and marking for handicapped people.

Enumerated value name	Designation	Definition
barrierFreeAccessible	Barrier free accessible	Accessible without any steps or other barriers. This is not as strong as handicappedAccessible.
handicappedAccessible	Handicapped accessible	Accessible for handicapped people. Wheelchair accessible is a special form of it.
handicappedEasements	Handicapped easements	There are special easements for handicapped people, like handrails or handicapped-friendly furniture.
handicappedMarked	Handicapped marked	There is a visible mark for the privilege of handicapped or disabled people (e.g. a wheelchair symbol).



Enumerated value name	Designation	Definition
none	None	No form of special accessibility, i.e. usually not convenient for handicapped people, e.g. because of steps or barriers.
orientationSystemForBlindPeople	Orientation system for blind people	There is some orientation system, which helps blind or visually impaired people. Examples might be some acoustic system or tactile paving.
other	Other	Other.
unknown	Unknown	It is unknown, whether there is a special form of accessibility.
wheelChairAccessible	Wheel chair accessible	Accessible by people in a wheelchair.

Table G.53— Values contained in the enumeration "AccessibilityEnum"

**G.4.4 The <<enumeration>> "AvailabilityEnum"**

An enumeration which states if something is available or not.

Enumerated value name	Designation	Definition
available	Available	The element in question is available.
notAvailable	Not available	The element in question is not available.
unknown	Unknown	There is no information about whether the element in question is available or not.

Table G.54— Values contained in the enumeration "AvailabilityEnum"

**G.4.5 The <<enumeration>> "ChargeTypeEnum"**

Charge type

Enumerated value name	Designation	Definition
additionalIntervalPrice	Additional interval price	Price for all intervals following the first interval.

Enumerated value name	Designation	Definition
firstIntervalPrice	First interval price	Price for the first interval, e.g. the first hour. See also 'additional'.
flat	Flat	Flat fee.
freeParking	Free parking	Free Parking. Set charge to 0.
maximum	Maximum	Maximum price for the given interval.
minimum	Minimum	Minimum price for the given interval.
other	Other	Other.
seasonTicket	Season ticket	Season ticket.
temporaryPrice	Temporary price	Temporary price.
unknown	Unknown	Unknown.

Table G.55— Values contained in the enumeration "ChargeTypeEnum"

#### G.4.6 The <<enumeration>> "ChargingStationUsageTypeEnum"

Type of usage for electric charging station(s).

Enumerated value name	Designation	Definition
electricalDevices	Electrical devices	Provides a plug for electrical devices (e.g. shaver, mobile phones, hair dryer, ...)
electricBikeOrMotorcycle	Electric bike or motorcycle	Charging of E-Bikes or E-Motorcycles.
electricVehicle	Electric vehicle	Charging of electric vehicles.
lorryPowerConsumption	Lorry power consumption	Supply for lorries with power consumption, e.g. for refrigerated goods transports.
motorhomeOrCaravanSupply	Motorhome or caravan supply	Supply for motorhomes or caravans.
other	Other	Other usage for the electric charging stations.

Table G.56— Values contained in the enumeration "ChargingStationUsageTypeEnum"

#### G.4.7 The <<enumeration>> "CurrencyEnum"

Three letter code defining the currency according to ISO 4217 (e.g. EUR for Euro). This enumeration only contains European currencies including the US dollar.

Enumerated value name	Designation	Definition
all	All	Lek (Albania)
amd	Amd	Armeniam Dram
azn	Azn	Azerbaijani Manat
bam	Bam	Convertible Mark (Bosnia and Herzogowina)
bgn	Bgn	Bulgarian Lev
byr	Byr	Belarussian Ruble
chf	Chf	Swiss Franc
czk	Czk	Czech Koruna
dkk	Dkk	Danish Krone
eur	Eur	Euro
gbp	Gbp	Pound Sterling
gel	Gel	Lari (Georgia)
hrk	Hrk	Croatian Kuna
huf	Huf	Forint (Hungary)
isk	Isk	Iceland Krona
ltl	Ltl	Litas (Lithuania)
mdl	Mdl	Moldovan Leu
mkd	Mkd	Denar
nok	Nok	Norwegian Krone
other	Other	Another currency.
pln	Pln	Zloty
ron	Ron	New Romanian Leu

Enumerated value name	Designation	Definition
rsd	Rsd	Serbian Dinar
rub	Rub	Russian Ruble
sek	Sek	Swedish Krona
try	Try	Turkish Lira
uah	Uah	Hryvnia (Ukraine)
usd	Usd	US Dollar

Table G.57— Values contained in the enumeration "CurrencyEnum"

#### G.4.8 The <<enumeration>> "EquipmentTypeEnum"

Equipment available on the parking or parking space or grouped parking spaces.

Enumerated value name	Designation	Definition
bikeParking	Bike parking	Bike parking.
cashMachine	Cash machine	Cash machine.
copyMachineOrService	Copy machine or service	A possibility to create copies of documents.
defibrillator	Defibrillator	Medical equipment to provide first aid after heart attacks.
dumpingStation	Dumping station	Possibility to get rid of sewerage (especially for motorhomes).
electricChargingStation	Electric charging station	For charging vehicles, motorhome supply etc. The 'numberOf...' attribute specifies the number of charging stations. You may specify the number of charging points and further information with component 'ElectricCharging'.
elevator	Elevator	Indication of the availability of elevators.
faxMachineOrService	Fax machine or service	A possibility to send and/or receive faxes.
fireExtinguisher	Fire extinguisher	Fire extinguisher

Enumerated value name	Designation	Definition
fireHose	Fire hose	A hose for water transport in case of fire.
fireHydrant	Fire hydrant	Fire hydrant
firstAidEquipment	First aid equipment	Equipment to support first aid on injured people. Note that 'defibrillator' is a separate literal.
freshWater	Fresh water	Possibility to get fresh water (e.g. for motorhomes) - toilets and showers etc. are not intended here.
iceFreeScaffold	Ice free scaffold	A technical equipment to remove ice and snow from the roof of lorries.
informationPoint	Information point	An information point with employees.
informatonStele	Informaton stele	An unmanned information point.
internetTerminal	Internet terminal	Public internet terminal. Charges may be specified using the TariffsAndPayment section.
internetWireless	Internet wireless	Public wireless internet. Specifying an amount would be the number of hotspots/access points. Charges may be specified using the TariffsAndPayment section.
luggageLocker	Luggage locker	Possibility to deposit luggage in a safe way.
none	None	None.
other	Other	Some other equipment. Use 'otherEquipmentOrServiceFacility' to specify it.
payDesk	Pay desk	A possibility to pay for parking (with employees).
paymentMachine	Payment machine	A parking ticket machine.
picnicFacilities	Picnic facilities	Indication of whether any picnicking facilities, such as tables, chairs and shaded areas, are available.
playground	Playground	A playground for children.

Enumerated value name	Designation	Definition
publicCardPhone	Public card phone	Indicates, whether there's a public telephone available that can be used with a card.
publicCoinPhone	Public coin phone	Indicates, whether there's a public telephone available that can be used with coins.
publicPhone	Public phone	Indicates, whether there's a public telephone available.
refuseBin	Refuse bin	Refuse bins for small amounts of garbage (see also 'wasteDisposal').
safeDeposit	Safe deposit	A possibility to store valuable possession in a safe way.
shower	Shower	Indicates, whether there are shower facilities available.
toilet	Toilet	Indicates, whether there are toilets available.
tollTerminal	Toll terminal	A terminal, where toll charges can be paid manually (this does not mean a toll gate on the road)
unknown	Unknown	Unknown.
vendingMachine	Vending machine	A vending machine for snacks, coffee etc. (without manpower).
wasteDisposal	Waste disposal	Possibility to get rid of waste in a legal way (e.g. for truckers or motorhomes). Normal refuse bins are not intended here.

Table G.58— Values contained in the enumeration "EquipmentTypeEnum"

**G.4.9 The <<enumeration>> "FuelType2Enum"**

Fuel types that are currently not supported in FuelTypeEnum.

Enumerated value name	Designation	Definition
all	All	All sort of fuel is accepted.

Enumerated value name	Designation	Definition
other	Other	Other.
petrol95Octane	Petrol95 octane	Petrol with 95 octane.
petrol98Octane	Petrol98 octane	Petrol with 98 octane.
petrolLeaded	Petrol leaded	Leaded petrol.
petrolUnleaded	Petrol unleaded	Unleaded petrol.
unknown	Unknown	The sort of fuel is not known.

Table G.59— Values contained in the enumeration "FuelType2Enum"

**G.4.10 The <<enumeration>> "GroupOfParkingSitesStatusEnum"**

The status of the group of parking sites (available spaces or not).

Enumerated value name	Designation	Definition
allParkingsFull	All parkings full	All parkings within the group are full.
enoughSpacesAvailable	Enough spaces available	Enough spaces available within the group.
multiStoreyParkingsFull	Multi storey parkings full	All multi storey parkings within the group are full.
noMoreParkingSpacesAvailable	No more parking spaces available	No more parking spaces available within the group.
other	Other	Other.
unknown	Unknown	The status of the group of parking sites is unknown.

Table G.60— Values contained in the enumeration "GroupOfParkingSitesStatusEnum"

**G.4.11 The <<enumeration>> "GroupOfParkingSitesTypeEnum"**

The type of this group of parking sites.

Enumerated value name	Designation	Definition
aggregationOfInformation	Aggregation of information	The main purpose of this group is to give summarized information of all encapsulated parking sites (e.g. number of spaces in total).
inhabitantZone	Inhabitant zone	This group is describing an inhabitant zone.
parkingArea	Parking area	A parking area in urban environment, for example all parkings sites in the western centre.
truckParkingPriorityZone	Truck parking priority zone	This group is describing a truck parking priority zone according to the EU regulation.

Table G.61— Values contained in the enumeration "GroupOfParkingSitesTypeEnum"

#### G.4.12 The <<enumeration>> "InterUrbanParkingSiteLocationEnum"

Location of the truck or motorway related parking.

Enumerated value name	Designation	Definition
layBy	Lay by	An area along a road that offers temporary parking.
motorway	Motorway	The parking is located directly on a motorway or a similar type of road.
nearbyMotorway	Nearby motorway	The parking is located with some distance to a motorway or a similar type of road but focussed on travellers from this motorway.
onStreet	On street	Vehicles are parking on the roadside.
other	Other	The parking is located somewhere else.

Table G.62— Values contained in the enumeration "InterUrbanParkingSiteLocationEnum"

#### G.4.13 The <<enumeration>> "JunctionClassificationEnum"

Explicit type of a junction.



Enumerated value name	Designation	Definition
borderCrossing	Border crossing	Motorway crossing a border (between counties, countries, states, ...).
interchange	Interchange	Usually two crossing motorways (four legs, but can be even more).
junction	Junction	Entrance and exit on a motorway.
junctionInOneDirection	Junction in one direction	Entry and Exit on a motorway, where just one direction of the motorway is accessible.
motorwayConnection	Motorway connection	Beginning or end of a motorway (e.g. changeover to smaller road).
operationalServiceJunction	Operational service junction	Junction accessible only for operational services.
other	Other	Other.
temporaryJunction	Temporary junction	Entrance and exit on a motorway, reserved either for emergency and service or on a temporary basis.
threeWayInterchange	Three way interchange	One motorway merging into another (with three legs in total).

Table G.63— Values contained in the enumeration "JunctionClassificationEnum"

#### G.4.14 The <<enumeration>> "LABELSecurityLevelEnum"

Security level defined by the LABEL project <http://truckparkinglabel.eu>.

Enumerated value name	Designation	Definition
none	None	None.
securityLevel1	Security level1	Providing the basics.
securityLevel2	Security level2	Technical measures to improve security.
securityLevel3	Security level3	Security measures are combined, Access of persons restricted.

Enumerated value name	Designation	Definition
securityLevel4	Security level4	Real time monitoring of vehicles and persons by professional staff.
securityLevel5	Security level5	Verification of vehicles and persons by professional staff, site manned around the clock.
unknown	Unknown	Unknown.

Table G.64— Values contained in the enumeration "LABELSecurityLevelEnum"

**G.4.15 The <<enumeration>> "LABELServiceLevelEnum"**

Service level defined by the LABEL project <http://truckparkinglabel.eu>.

Enumerated value name	Designation	Definition
none	None	None.
serviceLevel1	Service level1	Providing the basics.
serviceLevel2	Service level2	Also providing washing facilities and a more convenient lay-out of the parking area.
serviceLevel3	Service level3	Providing service for personal hygiene and shop/fuel station.
serviceLevel4	Service level4	Providing full service for driver and vehicle.
serviceLevel5	Service level5	Providing the high end of comfort levels.
unknown	Unknown	Unknown.

Table G.65— Values contained in the enumeration "LABELServiceLevelEnum"

**G.4.16 The <<enumeration>> "LoadType2Enum"**

Loads that are currently not supported in loadType.

Enumerated value name	Designation	Definition
refrigeratedGoods	Refrigerated goods	Refrigerated goods.

Table G.66— Values contained in the enumeration "LoadType2Enum"

**G.4.17 The <<enumeration>> "MeansOfPaymentEnum"**

Means of payment

Enumerated value name	Designation	Definition
cash	Cash	Cash payment.
cashCoinsOnly	Cash coins only	Cash payment with coins only.
directCashTransfer	Direct cash transfer	Direct cash transfer.
electronicSettlement	Electronic settlement	Electronic settlement; includes on board units.
mobileApp	Mobile app	Payment method using an app on a smartphone.
mobilePhone	Mobile phone	A payment method using a mobile phone but without an app or SMS, for instance by calling a number.
other	Other	Other.
payBySMS	Pay by s m s	Payment by SMS. The telephone number can be specified by 'paymentAdditionalDescription'.
paymentCard	Payment card	Payment by electronic card(s). Use 'AcceptedPaymentCards' resp. 'UsedPaymentCard' to specify them more exactly.
rfid	Rfid	RFID.
unknown	Unknown	Unknown.

Table G.67— Values contained in the enumeration "MeansOfPaymentEnum"

**G.4.18 The <<enumeration>> "OccupancyDetectionTypeEnum"**

Type of parking occupancy detection (balancing, single slot, ... ).

Enumerated value name	Designation	Definition
balancing	Balancing	Counting and balancing incoming and outgoing traffic amount ('indirect' method).
manual	Manual	Manual collection of occupancy information, i.e. operators count the vehicles.
modelBased	Model based	Occupancy detection is based on some model, i.e. hydrograph, forecasting or estimation.
none	None	No occupancy detection available.
other	Other	Other.
singleSpaceDetection	Single space detection	There is a detector for every individual parking space ('direct' method).
unknown	Unknown	Unknown.
unspecified	Unspecified	Unspecified.

Table G.68— Values contained in the enumeration "OccupancyDetectionTypeEnum"

#### G.4.19 The <<enumeration>> "OpeningStatusEnum"

The opening status of some entity (e.g. parking site, service facility, access,...)

Enumerated value name	Designation	Definition
closed	Closed	Closed, usually because of the regular opening times.
closedAbnormal	Closed abnormal	Closed because of some scheduled or unscheduled event, like holiday, maintenance, construction works or any kind of problems. It is possible that the closure will last for some time.
open	Open	Open resp. available.
openingTimesInForce	Opening times in force	The normal opening times are in force, i.e. it is not explicit said if it's open right now.
other	Other	Other.

Enumerated value name	Designation	Definition
statusUnknown	Status unknown	The opening status is unknown.

Table G.69— Values contained in the enumeration "OpeningStatusEnum"

**G.4.20 The <<enumeration>> "OperationStatusEnum"**

Specifies, whether some scenario or equipment is in operation or not.

Enumerated value name	Designation	Definition
inOperation	In operation	The specified element is in operation right now.
limitedOperation	Limited operation	The specified element is in operation on a limited basis.
notInOperation	Not in operation	The specified element is not operating right now.
notInOperationAbnormal	Not in operation abnormal	The specified element is not operating due to abnormal conditions (holidays, restoration-works, long-term closure, ...).
technicalDefect	Technical defect	The specified element is not in operation due to a technical defect.
unknown	Unknown	There is no information about the operation status.

Table G.70— Values contained in the enumeration "OperationStatusEnum"

**G.4.21 The <<enumeration>> "OwnershipTypeEnum"**

Ownership type enum.

Enumerated value name	Designation	Definition
other	Other	Other kind of ownership.
private	Private	Private ownership.
public	Public	Public ownership.
publicPrivate	Public private	A public private partnership model.

Enumerated value name	Designation	Definition
resident	Resident	A private individual ownership.
unknown	Unknown	An unknown kind of ownership.

**Table G.71— Values contained in the enumeration "OwnershipTypeEnum"**

**G.4.22 The <<enumeration>> "ParkingConditionsEnum"**

Defines if normal parking conditions are suspended or special parking conditions are in force.

Enumerated value name	Designation	Definition
normalParkingConditionsSuspended	Normal parking conditions suspended	The parking conditions (possibly including tariffs) that normally apply are temporarily suspended.
other	Other	Other.
specialParkingConditionsInForce	Special parking conditions in force	Parking conditions, other than those that normally apply, are currently in force for the parking site.

**Table G.72— Values contained in the enumeration "ParkingConditionsEnum"**

**G.4.23 The <<enumeration>> "ParkingDurationEnum"**

Parking durations.

Enumerated value name	Designation	Definition
longTerm	Long term	Long term parking in excess of any specified short term parking.
other	Other	Other.
pickUpDropOff	Pick up drop off	Very short duration parking normally of up to 20 minutes assigned for pick-ups and drop-offs.
shortTerm	Short term	Short term parking without indication of maximum duration.
shortTerm24hours	Short term24hours	Short term parking up to 24 hours.
shortTerm48hours	Short term48hours	Short term parking up to 48 hours.

Enumerated value name	Designation	Definition
shortTerm72hours	Short term72hours	Short term parking up to 72 hours.
shortTerm96hours	Short term96hours	Short term parking up to 96 hours.
unknown	Unknown	Unknown.

Table G.73— Values contained in the enumeration "ParkingDurationEnum"

#### G.4.24 The <<enumeration>> "ParkingFaultEnum"

Types of parking site or access faults.

Enumerated value name	Designation	Definition
barrierMalfunction	Barrier malfunction	The entrance or exit barrier(s) are malfunctioning causing access problems to vehicles.
communicationsFailure	Communications failure	Communications failure affecting parking site.
entranceExitObstructed	Entrance exit obstructed	One or more entrances or exits are obstructed to some degree causing access problems to vehicles.
erroneousOccupancyDisplayed	Erroneous occupancy displayed	Occupancy information displayed on signs associated with parking site (e.g. at entrance) are erroneous.
erroneousOccupancyInformation	Erroneous occupancy information	Occupancy information is subject to errors due to malfunctioning equipment.
noParkingInformationAvailable	No parking information available	No parking information available.
other	Other	Other than as defined in this enumeration.
paymentMachinesInoperative	Payment machines inoperative	Payment machines are not functioning normally.
reservationServiceOutOfOrder	Reservation service out of order	Reservation service out of order.
unknown	Unknown	Unknown parking facility fault.
unspecified	Unspecified	General fault of unspecified type.

Table G.74— Values contained in the enumeration "ParkingFaultEnum"

**G.4.25 The <<enumeration>> "ParkingLayoutEnum"**

Types of layout of the parking site.

Enumerated value name	Designation	Definition
automatedParkingGarage	Automated parking garage	Parking is completely automated from the point of leaving the vehicle in an arrival bay to its delivery back to the driver in a pickup bay.
covered	Covered	Some covered parking space.
field	Field	A non-bituminized parking space (e.g. for events or as extension).
multiStorey	Multi storey	Parking is on multiple levels within a parking building.
nested	Nested	A parking space within a complex structure of buildings or surrounded by buildings.
openSpace	Open space	A normal ground level parking place.
other	Other	Other.
singleLevel	Single level	Parking is inside a building on a single ground floor level.
underground	Underground	Parking is on one or more floors below ground level.
undergroundAndMultistorey	Underground and multistorey	Parking is on multiple floors levels including both below and above ground level.
unknown	Unknown	Unknown.

**Table G.75— Values contained in the enumeration "ParkingLayoutEnum"**

**G.4.26 The <<enumeration>> "ParkingModeEnum"**

The arrangement of the parking space or the group of parking spaces in relation to the road.



Enumerated value name	Designation	Definition
echelonParking	Echelon parking	Parking spaces are located in a diagonal relation to the road.
other	Other	Other.
parallelParking	Parallel parking	Parking spaces are located parallel to the road.
parkingOnOppositeSideOfRoad	Parking on opposite side of road	Parking is possible on the other side of the road.
perpendicularParking	Perpendicular parking	Parking spaces are located in an angle of nearly 90 degree to the road.

Table G.76— Values contained in the enumeration "ParkingModeEnum"

#### G.4.27 The <<enumeration>> "ParkingOccupancyEnum"

Parking Occupancy enum.

Enumerated value name	Designation	Definition
expectCarParkToBeFull	Expect car park to be full	Expect car park to be full.
full	Full	Full.
percentage10	Percentage10	10% full.
percentage20	Percentage20	20% full.
percentage30	Percentage30	30% full.
percentage40	Percentage40	40% full.
percentage50	Percentage50	50% full.
percentage60	Percentage60	60% full.
percentage70	Percentage70	70% full.
percentage80	Percentage80	80% full.
percentage90	Percentage90	90% full.
unknown	Unknown	Unknown.

Table G.77— Values contained in the enumeration "ParkingOccupancyEnum"

**G.4.28 The <<enumeration>> "ParkingOccupancyTrendEnum"**

List of terms used to describe the trend in parking space occupancy.

Enumerated value name	Designation	Definition
decreasing	Decreasing	Parking space occupancy is decreasing.
decreasingQuickly	Decreasing quickly	Parking space occupancy is decreasing quickly.
decreasingSlowly	Decreasing slowly	Parking space occupancy is decreasing slowly.
increasing	Increasing	Parking space occupancy is increasing.
increasingQuickly	Increasing quickly	Parking space occupancy is increasing quickly.
increasingSlowly	Increasing slowly	Parking space occupancy is increasing slowly.
other	Other	Other.
stable	Stable	Parking space occupancy is stable.
unknown	Unknown	Unknown.

**Table G.78— Values contained in the enumeration "ParkingOccupancyTrendEnum"**

**G.4.29 The <<enumeration>> "ParkingPaymentModeEnum"**

Mode of payment for parking.

Enumerated value name	Designation	Definition
other	Other	Other.
payAndDisplay	Pay and display	Pay at machine and display ticket inside vehicle.
payAndExit	Pay and exit	Pay directly at the exit with a payment card (usually, this payment card must have been used when entering as well). In 'AccessEquipmentEnum', there are three more literals to indicate, whether an entrance or exit has got this feature.
payByPrepaidToken	Pay by prepaid token	Pay by prepaid token that is used at exit.

Enumerated value name	Designation	Definition
payManualAtExitBooth	Pay manual at exit booth	Pay at the manned exit booth of the parking site.
payPriorToExit	Pay prior to exit	Pay at machine on foot prior to returning to vehicle and use payment ticket to exit.

Table G.79— Values contained in the enumeration "ParkingPaymentModeEnum"

**G.4.30 The <<enumeration>> "ParkingRouteDirectionEnum"**

The direction of the parking route.

Enumerated value name	Designation	Definition
awayFromParkingSite	Away from parking site	Away from parking site.
towardsParkingSite	Towards parking site	Towards parking site.

Table G.80— Values contained in the enumeration "ParkingRouteDirectionEnum"

**G.4.31 The <<enumeration>> "ParkingRouteTypeEnum"**

The type of the parking route.

Enumerated value name	Designation	Definition
bicycle	Bicycle	A parking route for bicycles.
lorry	Lorry	A parking route for lorries.
other	Other	Another type of parking route.
pedestrian	Pedestrian	A parking route for pedestrian.

Table G.81— Values contained in the enumeration "ParkingRouteTypeEnum"

**G.4.32 The <<enumeration>> "ParkingSecurityEnum"**

Specifies security measures related to the parking site or particular spaces.

Enumerated value name	Designation	Definition
areaSeperatedFromSurroundings	Area seperated from surroundings	Site is separated from its surroundings. Can also be used to express a space for noise-producing vehicles, e.g. lorries with cooling generators.
cctv	Cctv	CCTV (camera observation).
dog	Dog	Dog.
externalSecurity	External security	External security, e.g. police or staff not directly belonging to the parking.
fences	Fences	Fences.
floodLight	Flood light	Flood light (stronger than lighting).
guard24hours	Guard24hours	24/24 guard.
lighting	Lighting	Site is illuminated in a normal way (but not as strong as 'floodLight').
none	None	There are no security measures.
other	Other	None of the values in this enumeration applies. Use 'parkingAdditionalSecurity' instead.
securityStaff	Security staff	Security staff.
socialControl	Social control	Social control e.g. parking situated in a neighbourhood.
unknown	Unknown	Unknown.

Table G.82— Values contained in the enumeration "ParkingSecurityEnum"

#### G.4.33 The <<enumeration>> "ParkingSiteOvercrowdingStatusEnum"

The overcrowding status of the parking site. Choose between two levels or simply (no) overcrowding.

Enumerated value name	Designation	Definition
noOvercrowding	No overcrowding	The parking site is not overcrowded.
other	Other	Other.

Enumerated value name	Designation	Definition
overcrowding	Overcrowding	The parking site is overcrowded (as specified in ParkingThresholds).
overcrowdingLevel1	Overcrowding level1	The parking site is overcrowded at level 1 (as specified in ParkingThresholds).
overcrowdingLevel2	Overcrowding level2	The parking site is overcrowded at level 2 (as specified in ParkingThresholds).
unknown	Unknown	The overcrowding level is unknown.

**Table G.83— Values contained in the enumeration "ParkingSiteOvercrowdingStatusEnum"**

#### G.4.34 The <<enumeration>> "ParkingSiteStatusEnum"

The status of the parking site (spaces available or not).

Enumerated value name	Designation	Definition
almostFull	Almost full	The parking site is almost full (as defined by its configuration parameters).
full	Full	The parking site is full (as defined by its configuration parameters).
fullAtEntrance	Full at entrance	The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing VMS).
other	Other	Other.
spacesAvailable	Spaces available	Parking spaces are currently available.
unknown	Unknown	The status of the parking site is unknown.

**Table G.84— Values contained in the enumeration "ParkingSiteStatusEnum"**

#### G.4.35 The <<enumeration>> "ParkingSpaceAccessibilityEnum"

Easements for handicapped people especially related to a parking space or a group of parking spaces.

Enumerated value name	Designation	Definition
bordersMarked	Borders marked	The border of the parking space is marked (painted on the ground).
extraSpaceLeftSide	Extra space left side	There is some extra space on the left side of the parking space (in parking direction point of view), for example to improve the situation for wheelchair users.
extraSpaceRightSide	Extra space right side	There is some extra space on the right side of the parking space (in parking direction point of view), for example to improve the situation for wheelchair users.
nearbyPedestrianExit	Nearby pedestrian exit	The parking space is quite near to a pedestrian exit. Note: Can be more exactly defined by using 'dedicatedAccess'.
other	Other	Other.

**Table G.85— Values contained in the enumeration "ParkingSpaceAccessibilityEnum"**

**G.4.36 The <<enumeration>> "ParkingSpacePhysicsEnum"**

Specifies drive through and open air properties for the parking space or the group of parking spaces.

Enumerated value name	Designation	Definition
driveThrough	Drive through	Entering as well as leaving the parking space can be done straight in the direction of parking.
openAir	Open air	There is no roof and not another storey on top of the parking space, which could prevent from rain, for example.

**Table G.86— Values contained in the enumeration "ParkingSpacePhysicsEnum"**

**G.4.37 The <<enumeration>> "ParkingSpecialLocationEnum"**

Locations, often associated with a building, for a SpecialLocationParkingSite.

Enumerated value name	Designation	Definition
airportTerminal	Airport terminal	The parking site is associated with an airport terminal.
cableCarStation	Cable car station	The parking site is associated with a cable car station.
campground	Campground	The parking site is associated with a campground.
cinema	Cinema	The parking site is associated with a cinema.
coachStation	Coach station	The parking site is associated with a coach station.
conventionCentre	Convention centre	The parking site is associated with a convention centre.
exhibitorCentre	Exhibitor centre	The parking site is associated with an exhibition centre.
ferryTerminal	Ferry terminal	The parking site is associated with a ferry terminal.
market	Market	The parking site is associated with a market.
other	Other	The parking site is associated with some other location. Use "parkingOtherSpecialLocation" to specify details.
publicTransportStation	Public transport station	The parking site is associated with a public transport station.
religiousCentre	Religious centre	The parking site is associated with a religious centre.
shoppingCentre	Shopping centre	The parking site is associated with a shopping centre.
skilift	Skilift	The parking site is associated with a ski lift.
specificFacility	Specific facility	The parking site is associated with a specific facility (e.g. a hospital, a tourist site, a garden centre, a park etc.). Attribute "parkingOtherSpecialLocation" may be used to specify details.

Enumerated value name	Designation	Definition
themePark	Theme park	The parking site is associated with a theme park.
trainStation	Train station	The parking site is associated with a train station.
unknown	Unknown	Unknown.
vehicleOnRailTerminal	Vehicle on rail terminal	The parking site is associated with a vehicle-to-rail terminal.

**Table G.87— Values contained in the enumeration "ParkingSpecialLocationEnum"**

**G.4.38 The <<enumeration>> "ParkingSupervisionEnum"**

Defines the kind of supervision of the parking site.

Enumerated value name	Designation	Definition
controlCentreOffSite	Control centre off site	Control centre off site.
controlCentreOnSite	Control centre on site	Control centre on site.
none	None	None.
onSite	On site	On site.
other	Other	Other.
patrol	Patrol	Patrol.
remote	Remote	Remote.
unknown	Unknown	Unknown.

**Table G.88— Values contained in the enumeration "ParkingSupervisionEnum"**

**G.4.39 The <<enumeration>> "ParkingTypeOfGroup"**

The type of group specification (group of parking spaces).

Enumerated value name	Designation	Definition
adjacentSpaces	Adjacent spaces	A description of adjacent spaces.



Enumerated value name	Designation	Definition
completeFloor	Complete floor	A description for a complete floor in a car park.
mixedUsage	Mixed usage	A definition for mixed usage for this group (e.g. by time). This means there are more definitions for this group or for sub- or supersets of it.
nonAdjacentSpaces	Non adjacent spaces	A description of non-adjacent spaces.
other	Other	Some other kind of group.
singleParameters	Single parameters	This group provides some single features for a selected number of spaces. For example, you can define all spaces, where electric charging stations are provided. It is not a complete description of the parking spaces.
statisticsOnly	Statistics only	This group provides statistical figures only, for example 60 spaces for lorries in total. Usually, this kind of group does not use georeference information. It is not a complete description of parking spaces.

Table G.89— Values contained in the enumeration "ParkingTypeOfGroup"

#### G.4.40 The <<enumeration>> "ParkingUsageScenarioEnum"

Types of parking usage (park & ride, kiss & ride, ...)

Enumerated value name	Designation	Definition
automaticParkingGuidance	Automatic parking guidance	Specifies, if there is a (visual) guidance system within the parking site, which helps the drivers to find free spaces. Note: This is not a parking VMS or a parking route, which are usually located outside the parking site.
carSharing	Car sharing	A parking site for people who are sharing cars organised by a car sharing company..
dropOff	Drop off	The parking site or space(s) are designed for drop off only.

Enumerated value name	Designation	Definition
dropOffMechanical	Drop off mechanical	A mechanical drop off service.
dropOffWithValet	Drop off with valet	A valet drop off service.
eventParking	Event parking	Parking is associated with an event. Use 'eventParkingType' or 'eventParkingType2' to specify the event.
kissAndRide	Kiss and ride	Parking site with possibility for very short parking to drop off (or drop on) passengers for public transport.
liftshare	Liftshare	A parking site for people who are sharing their cars.
loadingBay	Loading bay	The parking site or space(s) are designed as a loading bay.
other	Other	Some other usage scenario.
overnightParking	Overnight parking	The parking site or space(s) are designed for overnight parking. Note that the absence of this scenario does not automatically mean a prohibition of overnight parking. See also PermitsAndProhibitions.
parkAndCycle	Park and cycle	A parking site for people who continue their journey by bike.
parkAndRide	Park and ride	Parking for public transport users.
parkAndWalk	Park and walk	A parking site for people who continue to walk.
restArea	Rest area	The parking site is associated with a rest area, i.e. people can relax some time outside their car there. Note that the presence of some bench, picnic place or toilet is already sufficient; there is no need for a restaurant or a building.
serviceArea	Service area	The parking site is associated with a service area.
staffGuidesToSpace	Staff guides to space	Staff guides to space.

Enumerated value name	Designation	Definition
truckParking	Truck parking	The parking site is designed for lorries (other vehicles are allowed as well).
unknown	Unknown	Unknown.
vehicleLift	Vehicle lift	Vehicle lift

Table G.90— Values contained in the enumeration "ParkingUsageScenarioEnum"

**G.4.41 The <<enumeration>> "ParkingVacantSpacesEnum"**

Parking vacant spaces enum.

Enumerated value name	Designation	Definition
expectNoSpacesAvailable	Expect no spaces available	Expect no parking spaces available.
lessThan10SpacesAvailable	Less than10 spaces available	Less than 10 parking spaces available.
lessThan20SpacesAvailable	Less than20 spaces available	Less than 20 parking spaces available.
lessThan30SpacesAvailable	Less than30 spaces available	Less than 30 parking spaces available.
lessThan40SpacesAvailable	Less than40 spaces available	Less than 40 parking spaces available.
lessThan50SpacesAvailable	Less than50 spaces available	Less than 50 parking spaces available.
noParkingSpacesAvailable	No parking spaces available	No parking spaces available.
onlyAFewSpacesAvailable	Only a few spaces available	Only a few parking spaces available.
other	Other	Other.
unknown	Unknown	Unknown.

Table G.91— Values contained in the enumeration "ParkingVacantSpacesEnum"

**G.4.42 The <<enumeration>> "PaymentCardBrandsEnum"**

Brands of payment cards.

Enumerated value name	Designation	Definition
americanExpress	American express	American Express
cirrus	Cirrus	Cirrus
dinersClub	Diners club	Diners Club
discoverCard	Discover card	Discover Card
giroCard	Giro card	Girocard
maestro	Maestro	Maestro
masterCard	Master card	MasterCard
other	Other	Other
visa	Visa	Visa
vPay	V pay	V PAY

Table G.92— Values contained in the enumeration "PaymentCardBrandsEnum"

**G.4.43 The <<enumeration>> "PaymentCardTypesEnum"**

Types of payment cards.

Enumerated value name	Designation	Definition
chargeCard	Charge card	Charge card
creditCard	Credit card	Credit card
debitCard	Debit card	Debit card
fleetCard	Fleet card	Fleet or petrol station card.
other	Other	Some other type of card.
storedValueCard	Stored value card	Stored value card / prepaid card.

Table G.93— Values contained in the enumeration "PaymentCardTypesEnum"

**G.4.44 The <<enumeration>> "PermitTypeEnum"**

Type of permission for parking.

Enumerated value name	Designation	Definition
blueZonePermit	Blue zone permit	Blue zone permit.
careTakingPermit	Care taking permit	Permit for care taking.
carpoolingPermit	Carpooling permit	A permit for vehicles used for carpooling.
carSharingPermit	Car sharing permit	A permit for car sharing vehicles.
disabledPermit	Disabled permit	Permit for disabled.
emergencyVehiclePermit	Emergency vehicle permit	Permit for emergency vehicle.
employeePermit	Employee permit	Permit for employees.
fairPermit	Fair permit	Permit of a fair.
governmentPermit	Government permit	Vehicles that have an official parking permission from the appropriate (local) government.
maintenanceVehiclePermit	Maintenance vehicle permit	Permit for a maintenance vehicle.
other	Other	Some other permit.
residentPermit	Resident permit	Permit for a resident.
roadWorksPermit	Road works permit	Permit for road works.
specificIdentifiedVehiclePermit	Specific identified vehicle permit	A specific identified vehicle.
taxiPermit	Taxi permit	Permit for a taxi.

Table G.94— Values contained in the enumeration "PermitTypeEnum"

## G.4.45 The &lt;&lt;enumeration&gt;&gt; "PublicEventType2Enum"

Additional types for a public event.

Enumerated value name	Designation	Definition
artEvent	Art event	Art event
beerFestival	Beer festival	Beer festival
filmFestival	Film festival	Film festival

Enumerated value name	Designation	Definition
fireworkDisplay	Firework display	Firework display
flowerEvent	Flower event	Flower event
foodFestival	Food festival	Food festival
openAirConcert	Open air concert	Open air concert
other	Other	Some other kind of public event.
soundAndLightShow	Sound and light show	Sound and light show.
streetFestival	Street festival	Street festival
theatricalEvent	Theatrical event	Theatrical event
unknown	Unknown	Service provider does not know at time of message generation.
wineFestival	Wine festival	Wine festival

Table G.95— Values contained in the enumeration "PublicEventType2Enum"

**G.4.46 The <<enumeration>> "PublicHolidayTypeEnum"**

Types of public holiday.

Enumerated value name	Designation	Definition
betweenChristmasAndNewYear	Between christmas and new year	The days between the Christmas and New Year public holidays which are not official public holidays.
boxingDay	Boxing day	The day following Christmas day.
bridgeHoliday	Bridge holiday	A day between a public holiday and the weekend.
christmasDayAndBoxingDay	Christmas day and boxing day	Christmas day and Boxing day (day following Christmas day).
christmasEve	Christmas eve	The day before Christmas day.
christmasHolidayPeriod	Christmas holiday period	The period between the Christmas and New Year public holidays (inclusive).

Enumerated value name	Designation	Definition
dayFollowingPublicHoliday	Day following public holiday	A day following a public holiday.
easterFridayHoliday	Easter friday holiday	Good Friday (the Friday prior to the Easter weekend).
easterHolidayPeriod	Easter holiday period	The period between Easter Friday and Easter Monday (inclusive).
easterMondayHoliday	Easter monday holiday	The Monday following the Easter weekend.
easterSaturday	Easter saturday	The Saturday of the Easter weekend.
easterSunday	Easter sunday	Easter Sunday.
eveOfPublicHoliday	Eve of public holiday	The day preceding a public holiday.
holidayPeriod	Holiday period	A holiday period.
inLieuOfPublicHoliday	In lieu of public holiday	A holiday in lieu of a public holiday that falls on a weekend.
january2ndHoliday	January2nd holiday	The 2nd of January holiday.
newYearsDay	New years day	New Year's day.
newYearsEve	New years eve	The day before New Year's day.
notPublicHoliday	Not public holiday	A day that is not a public holiday.
other	Other	None of the elements in the list. Public holiday is specified by 'publicHolidayName' instead.
publicHoliday	Public holiday	A public holiday in the respective country/region.

Table G.96— Values contained in the enumeration "PublicHolidayTypeEnum"

**G.4.47 The <<enumeration>> "RegulationEnum"**

Regulation parameters for actions.

Enumerated value name	Designation	Definition
heterogeneous	Heterogeneous	The regulation rule is quite complex and cannot be noted here.

Enumerated value name	Designation	Definition
onlyInsideBuildings	Only inside buildings	Only inside buildings.
onlyOnRequest	Only on request	Only on request (i.e. permission needed).
onlyOutsideBuildings	Only outside buildings	Only outside buildings.
other	Other	Other.
permitted	Permitted	Permitted.
permittedOnlyAtParticularTimes	Permitted only at particular times	Permitted only at particular times.
permittedOnlyOnParticularAreas	Permitted only on particular areas	Permitted only on particular areas (but inside the parking site ground).
prohibited	Prohibited	Prohibited.
prohibitedAtParticularTimes	Prohibited at particular times	Prohibited at particular times.
prohibitedOnParticularAreas	Prohibited on particular areas	Prohibited on particular areas.
punishable	Punishable	The action is prohibited and can be punished.
seasonalHeterogeneous	Seasonal heterogeneous	It depends on the season, whether the action is allowed or not.
unknown	Unknown	The regulation is unknown.
unspecified	Unspecified	There is no regulation for this action.

Table G.97— Values contained in the enumeration "RegulationEnum"

**G.4.48 The <<enumeration>> "ReservationTypeEnum"**

Reservation type enum.

Enumerated value name	Designation	Definition
mandatory	Mandatory	Places need to be reserved.
notAvailable	Not available	Places cannot be reserved.
optional	Optional	Places can be reserved, but must not.



Enumerated value name	Designation	Definition
partly	Partly	Some places can or must be reserved, others not (do not use when specifying a single parking space).
unknown	Unknown	Possibility of reservation is unknown,
unspecified	Unspecified	Possibility of reservation is not specified.

Table G.98— Values contained in the enumeration "ReservationTypeEnum"

**G.4.49 The <<enumeration>> "RestAreaActivityEnum"**

Rest area activity enum.

Enumerated value name	Designation	Definition
barbecue	Barbecue	Barbeque.
camping	Camping	Camping.
handlingHazardousMaterial	Handling hazardous material	Handling with hazardous material.
openFire	Open fire	Open fire.
other	Other	Other.
overnightParking	Overnight parking	Overnight parking.
picnic	Picnic	Picnic.
smoking	Smoking	Smoking.

Table G.99— Values contained in the enumeration "RestAreaActivityEnum"

**G.4.50 The <<enumeration>> "RoadTypeEnum"**

Categorisation of the road type (motorway, main road, ...).

Enumerated value name	Designation	Definition
mainRoad	Main road	Main road.
motorway	Motorway	Motorway.

Enumerated value name	Designation	Definition
other	Other	Other.
trunkRoad	Trunk road	Trunk road.

**Table G.100— Values contained in the enumeration "RoadTypeEnum"**

**G.4.51 The <<enumeration>> "ServiceFacilityTypeEnum"**

Service facilities available on the parking site, parking space or group of parking spaces. In distinction to equipment, a service is mostly manned.

Enumerated value name	Designation	Definition
bikeSharing	Bike sharing	Bike Sharing.
cafe	Cafe	Cafe.
carWash	Car wash	Car wash.
docstop	Docstop	The site is part of the Docstop project, <a href="http://www.docstoponline.eu">http://www.docstoponline.eu</a> , which means medical assistance for professional drivers.
foodShopping	Food shopping	Food shopping.
hotel	Hotel	A hotel.
kiosk	Kiosk	Kiosk.
laundry	Laundry	A possibility for washing clothes (might also be a laundromat with coins).
leisureActivities	Leisure activities	There are leisure activities offered on the site or in the very near surrounding. Use the additional description attribute to give details.
medicalFacility	Medical facility	Medical facility.
motel	Motel	Hotel on the motorway or other accommodation service.
motorwayRestaurant	Motorway restaurant	Restaurant located on a motorway rest area.
motorwayRestaurantSmall	Motorway restaurant small	Smaller type of restaurant located on a motorway rest area. Might be with limited offers.

Enumerated value name	Designation	Definition
other	Other	Some other service facility. Use 'otherEquipmentOrServiceFacility' to specify it.
overnightAccommodation	Overnight accommodation	Overnight Accomodation.
petrolStation	Petrol station	Indicates whether it is possible to get petrol.
pharmacy	Pharmacy	Pharmacy.
police	Police	Indicates whether a police station is on site or very close.
restaurant	Restaurant	Restaurant.
restaurantSelfService	Restaurant self service	A restaurant where people arrange and fetch their meal themselves, this might enclose a buffet.
shop	Shop	A shop of unspecified kind.
sparePartsShopping	Spare parts shopping	Spare parts shopping.
touristInformation	Tourist information	Tourist information with employees.
truckRepair	Truck repair	Truck repair.
truckWash	Truck wash	Truck wash.
tyreRepair	Tyre repair	A tyre repair service.
unknown	Unknown	Unknown.
vehicleMaintenance	Vehicle maintenance	Garage repair service.

Table G.101— Values contained in the enumeration "ServiceFacilityTypeEnum"

**G.4.52 The <<enumeration>> "SpecialDayTypeEnum"**

Collection of general types of days.

Enumerated value name	Designation	Definition
bicycleRaceDay	Bicycle race day	Day of local bicycle race.
bullFightDay	Bull fight day	Day of local bullfight.

Enumerated value name	Designation	Definition
carnivalDay	Carnival day	Day of a local carnival involving a procession along roads.
electionDay	Election day	Election day.
exhibitionDay	Exhibition day	Day of a local exhibition.
festivalDay	Festival day	Day of a local festival.
gamesDay	Games day	Day of local games (e.g. highland games in Scotland).
holidays	Holidays	A day within the school holidays. You can use the PublicHoliday class to specify more details.
horseRaceMeetingDay	Horse race meeting day	Day of a local horse race meeting.
huntMeetingDay	Hunt meeting day	Day of a local hunt meeting.
marathonRaceDay	Marathon race day	Day of local marathon race.
marketDay	Market day	Day of a local market.
motorSportRaceMeetingDay	Motor sport race meeting day	Day of a local motor sport race meeting.
nonWorkingDay	Non working day	A non-working day in the specific country/region.
other	Other	Other.
publicHoliday	Public holiday	Public holiday.
raceMeetingDay	Race meeting day	Day of a local race meeting (other than horse or motor sport).
regattaDay	Regatta day	Day of a local regatta.
schoolDay	School day	School day.
showDay	Show day	Day of a local show.
sportsMeetingDay	Sports meeting day	Day of a local sports meeting.
undefinedDayType	Undefined day type	UndefinedDayType
unknown	Unknown	Unknown.
workingDay	Working day	A working day in the specific country/region.

Table G.102— Values contained in the enumeration "SpecialDayTypeEnum"

**G.4.53 The <<enumeration>> "TruckParkingDynamicManagementEnum"**

Dynamic parking mode enum.

Enumerated value name	Designation	Definition
compactParking	Compact parking	Lorries are parking one after the other in different lanes; each lane has a dedicated time of departure (which might be displayed on a sign gantry).
noDynamicParkingManagement	No dynamic parking management	No dynamic parking management.
other	Other	Some other type of dynamic parking management.
queueParking	Queue parking	Lorries are parking in queues, one after the other. Each lorry must have an earlier time of departure than all the lorries behind it.

Table G.103— Values contained in the enumeration "TruckParkingDynamicManagementEnum"

**G.4.54 The <<enumeration>> "UrbanParkingSiteTypeEnum"**

The type of an urban parking site.

Enumerated value name	Designation	Definition
offStreetParking	Off street parking	Vehicles are parking off the road, e.g. on a parking space, a car park or some other area designed for parking.
onStreetParking	On street parking	Vehicles are parking on the roadside.
other	Other	The parking is associated with some other location.

Table G.104— Values contained in the enumeration "UrbanParkingSiteTypeEnum"

**G.4.55 The <<enumeration>> "UserTypeEnum"**

Types of users; used for parking but also for usage of equipment and services.

Enumerated value name	Designation	Definition
allUsers	All users	All users.
commuters	Commuters	Commuters.
customers	Customers	Customers.
disabled	Disabled	Physically impaired people.
elderlyUsers	Elderly users	Elderly users.
employees	Employees	Employees.
families	Families	Families.
handicapped	Handicapped	Persons with deficiencies in their daily life.
hearingImpaired	Hearing impaired	People with difficulties to hear.
hotelGuests	Hotel guests	Hotel guests.
longTermParker	Long term parker	Long-term parker.
members	Members	Members.
men	Men	Men.
other	Other	Other.
overnightParker	Overnight parker	Overnight parker.
parkAndCycleUser	Park and cycle user	Park and cycle user.
parkAndRideUsers	Park and ride users	Users that are changing into public transport at this parking.
parkAndWalkUser	Park and walk user	Park and walk user.
pensioners	Pensioners	Pensioners.
pregnantWomen	Pregnant women	Pregnant women.
registeredDisabledUsers	Registered disabled users	Registered disabled persons.
reservationHolders	Reservation holders	Those who have a valid reservation for the duration of parking.

Enumerated value name	Designation	Definition
residents	Residents	Local residents.
seasonTicketHolders	Season ticket holders	Season ticket holders.
shoppers	Shoppers	Shoppers.
shortTermParker	Short term parker	Short-term parker.
sportEventAwaySupporters	Sport event away supporters	Sport event away supporters.
sportEventHomeSupporters	Sport event home supporters	Sport event home supporters.
staff	Staff	Staff.
students	Students	Students.
subscribers	Subscribers	Subscribers.
unknown	Unknown	Unknown.
visitors	Visitors	Visitors.
visuallyImpaired	Visually impaired	People with difficulties to see.
wheelchairUsers	Wheelchair users	Wheelchair users.
women	Women	Women.

**Table G.105— Values contained in the enumeration "UserTypeEnum"**

#### **G.4.56 The <<enumeration>> "VehicleType2Enum"**

Vehicle types which are currently not supported in vehicleType.

Enumerated value name	Designation	Definition
heavyGoodsVehicle	Heavy goods vehicle	Heavy goods vehicle
heavyGoodsVehicleWithTrailer	Heavy goods vehicle with trailer	Heavy goods vehicle with trailer
heavyHaulageVehicle	Heavy haulage vehicle	Heavy-haulage vehicle
largeCar	Large car	Large car
lightGoodsVehicle	Light goods vehicle	Light goods vehicle

Enumerated value name	Designation	Definition
lightGoodsVehicleWithTrailer	Light goods vehicle with trailer	Light goods vehicle with trailer
minibus	Minibus	Minibus
motorhome	Motorhome	Motorhome
passengerCar	Passenger car	Passenger car
smallCar	Small car	Small car
unknown	Unknown	Unknown.

Table G.106— Values contained in the enumeration "VehicleType2Enum"

**G.4.57 The <<enumeration>> "VehicleUsage2Enum"**

Vehicle usage types which are currently not supported in vehicleUsageType.

Enumerated value name	Designation	Definition
carSharing	Car sharing	Vehicles operated by a car-sharing company.
cityLogistics	City logistics	Vehicles that are used to deliver goods in a city area.

Table G.107— Values contained in the enumeration "VehicleUsage2Enum"



## Annex H (normative)

### Referenced XML Schema for Parking Publications model

#### H.1 Overview

This Annex shall be used when using an XML encoding.

As specified in Part 1 this schema already uses Extensions and further on may be extended by use of Extensions. Such extensions shall be done in a manner conformant to the requirements specified in Part 1 - Clause 9 and Annex D.

Supplied data claiming conformance to this Part and specifically this Annex shall positively validate against the schema specified in this Annex including any permissible Level B Extensions.

The schemata provided in this annex are part of the Parking Publications model as specified in Clauses 8 and 9.

#### H.2 Schema for Parking Table Publication

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:D2LogicalModel="http://datex2.eu/schema/2/2_0" version="2.3" targetNamespace="http://datex2.eu/schema/2/2_0"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="_AreaExtensionType">
    <xs:sequence>
      <xs:element name="areaExtended" type="D2LogicalModel:AreaExtended" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
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      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ContactDetailsVersionedReference">
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    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ExtensionType">
    <xs:sequence>
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    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_GenericPublicationExtensionType">
    <xs:sequence>
      <xs:element name="parkingTablePublication" type="D2LogicalModel:ParkingTablePublication" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
```

```

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  <xs:sequence>
    <xs:element name="parkingSpaceBasics" type="D2LogicalModel:ParkingSpaceBasics" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="groupIndex" type="xs:int" use="required" />
</xs:complexType>
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    <xs:element name="parkingSpace" type="D2LogicalModel:ParkingSpace" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
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  <xs:sequence>
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</xs:complexType>
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    <xs:element name="location" type="D2LogicalModel:Location" minOccurs="1" maxOccurs="1" />
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</xs:complexType>
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  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRecord" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingRouteDetailsVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRouteDetails" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingSiteScenarioIndexParkingUsageScenario">
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenario" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="scenarioIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingSpace">

```

```

<xs:sequence>
  <xs:element name="parkingSpaceBasics" type="D2LogicalModel:ParkingSpaceBasics" minOccurs="1" maxOccurs="1" />
</xs:sequence>
<xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingSpaceBasicsEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility">
  <xs:sequence>
    <xs:element name="parkingEquipmentOrServiceFacility" type="D2LogicalModel:ParkingEquipmentOrServiceFacility"
minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="equipmentOrServiceFacilityIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingSpaceBasicsScenarioIndexParkingUsageScenario">
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenario" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="scenarioIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_PeriodExtensionType">
  <xs:sequence>
    <xs:element name="periodExtended" type="D2LogicalModel:PeriodExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_PointExtensionType">
  <xs:sequence>
    <xs:element name="pointExtended" type="D2LogicalModel:PointExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_PolygonAreaIndexPointCoordinates">
  <xs:sequence>
    <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="index" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_PredefinedItineraryVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedItinerary" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PredefinedLocationVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedLocation" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PredefinedNonOrderedLocationGroupVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedNonOrderedLocationGroup" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_VehicleCharacteristicsExtensionType">
  <xs:sequence>

```

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    <xs:element name="vehicleCharacteristicsExtended" type="D2LogicalModel:VehicleCharacteristicsExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="_VmsUnitRecordVersionedReference">
    <xs:complexContent>
        <xs:extension base="D2LogicalModel:VersionedReference">
            <xs:attribute name="targetClass" use="required" fixed="VmsUnitRecord" />
        </xs:extension>
    </xs:complexContent>
</xs:complexType>
<xs:complexType name="AcceptedPaymentCards">
    <xs:annotation>
        <xs:documentation>Use this class to describe details in case acceptedMeansOfPayment is set to
'paymentCard'.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element name="paymentCards" type="D2LogicalModel:PaymentCardTypesEnum" minOccurs="1" maxOccurs="unbounded">
            <xs:annotation>
                <xs:documentation>List of accepted payment cards.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="otherPaymentCards" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
            <xs:annotation>
                <xs:documentation>Further accepted payment cards.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="paymentCardBrands" type="D2LogicalModel:PaymentCardBrandsEnum" minOccurs="0"
maxOccurs="unbounded">
            <xs:annotation>
                <xs:documentation>List of accepted brands for payment cards.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="otherPaymentCardBrands" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
            <xs:annotation>
                <xs:documentation>Further accepted brands of payment cards.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="acceptedPaymentCardsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
</xs:complexType>
<xs:simpleType name="AccessCategoryEnum">
    <xs:annotation>
        <xs:documentation>Specifies the category of the access.</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
        <xs:enumeration value="vehicleEntranceAndExit">
            <xs:annotation>
                <xs:documentation>An entrance and exit for vehicles.</xs:documentation>
            </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="vehicleEntrance">
            <xs:annotation>
                <xs:documentation>An entrance for vehicles.</xs:documentation>
            </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="vehicleExit">
            <xs:annotation>
                <xs:documentation>An exit for vehicles.</xs:documentation>
            </xs:annotation>
        </xs:enumeration>
    </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianEntranceAndExit">
  <xs:annotation>
    <xs:documentation>An entrance and exit for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianEntrance">
  <xs:annotation>
    <xs:documentation>An entrance for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianExit">
  <xs:annotation>
    <xs:documentation>An exit for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rentalCarReturn">
  <xs:annotation>
    <xs:documentation>An entrance to return rental cars.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bicycles">
  <xs:annotation>
    <xs:documentation>An access for bicycles.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="emergencyExit">
  <xs:annotation>
    <xs:documentation>An exit that can be used by pedestrians in case of emergency (i.e. among others easy to access and
signed).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>The category of this access is not specified any further.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AccessEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Specifies additional equipment for this access.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="barrier">
      <xs:annotation>
        <xs:documentation>There is a barrier on this entrance or exit. Usually access is granted through tickets, buttons or electronic
systems.</xs:documentation>

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</xs:annotation>
</xs:enumeration>
<xs:enumeration value="trafficSignal">
  <xs:annotation>
    <xs:documentation>There is a traffic signal installation controlling this access.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ticketButtonMachine">
  <xs:annotation>
    <xs:documentation>A machine at this entrance provides a parking ticket by pressing a button.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ticketCardMachine">
  <xs:annotation>
    <xs:documentation>A machine at this entrance provides a parking ticket by inserting some payment or identity
card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payAndExitMachine">
  <xs:annotation>
    <xs:documentation>A machine at this exit enables payment directly by inserting a payment or identity card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AccessibilityEnum">
  <xs:annotation>
    <xs:documentation>Special forms of accessibility, easements and marking for handicapped people.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="barrierFreeAccessible">
      <xs:annotation>
        <xs:documentation>Accessible without any steps or other barriers. This is not as strong as
handicappedAccessible.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="handicappedAccessible">
      <xs:annotation>
        <xs:documentation>Accessible for handicapped people. Wheelchair accessible is a special form of it.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wheelChairAccessible">
      <xs:annotation>
        <xs:documentation>Accessible by people in a wheelchair.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="handicappedEasements">
      <xs:annotation>
        <xs:documentation>There are special easements for handicapped people, like handrails or handicapped-friendly
furniture.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="orientationSystemForBlindPeople">
      <xs:annotation>

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    <xs:documentation>There is some orientation system, which helps blind or visually impaired people. Examples might be some
    acoustic system or tactile paving.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="handicappedMarked">
  <xs:annotation>
    <xs:documentation>There is a visible mark for the privilege of handicapped or disabled people (e.g. a wheelchair
    symbol).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>No form of special accessibility, i.e. usually not convenient for handicapped people, e.g. because of steps
    or barriers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>It is unknown, whether there is a special form of accessibility.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="AffectedCarriagewayAndLanes">
  <xs:annotation>
    <xs:documentation>Supplementary positional information which details carriageway and lane locations. Several instances may
    exist where the element being described extends over more than one carriageway.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="carriageway" type="D2LogicalModel:CarriagewayEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the section of carriageway to which the location relates.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lane" type="D2LogicalModel:LaneEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Indicates the specific lane to which the location relates.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="footpath" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates whether the pedestrian footpath is the subject or part of the subject of the location. (True =
        footpath is subject)</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lengthAffected" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This indicates the length of road measured in metres affected by the associated traffic
        element.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="affectedCarriagewayAndLanesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

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```

<xs:complexType name="AlertCArea">
  <xs:annotation>
    <xs:documentation>An area defined by reference to a predefined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location
table number.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="areaLocation" type="D2LogicalModel:AlertCLocation">
      <xs:annotation>
        <xs:documentation>Area location defined by a specific Alert-C location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCDirection">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow along the road to which the information relates.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCDirectionCoded" type="D2LogicalModel:AlertCDirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow to which the situation, traffic data or information is related. Positive is in the
direction of coding of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionNamed" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ALERT-C name of a direction e.g. Brussels -&gt; Lille.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionSense" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates for circular routes (i.e. valid only for ring roads) the sense in which navigation should be made
from the primary location to the secondary location, to avoid ambiguity. TRUE indicates positive RDS direction, i.e. direction of coding
of road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AlertCDirectionEnum">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive (resp. negative)
direction corresponds to the positive offset direction within the RDS location table.</xs:documentation>
  </xs:annotation>

```



```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="both">
    <xs:annotation>
      <xs:documentation>Indicates that both directions of traffic flow are affected by the situation or relate to the traffic
data.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="negative">
    <xs:annotation>
      <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the negative direction
corresponds to the negative offset direction within the RDS location table.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="positive">
    <xs:annotation>
      <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive direction
corresponds to the positive offset direction within the RDS location table.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown direction.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="AlertCLinear" abstract="true">
  <xs:annotation>
    <xs:documentation>A linear section along a road defined between two points on the road by reference to a pre-defined ALERT-C
location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location
table number.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCLinearByCode">
  <xs:annotation>
    <xs:documentation>A linear section along a road defined by reference to a linear section in a pre-defined ALERT-C location
table.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">

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```

<xs:sequence>
  <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
  <xs:element name="locationCodeForLinearLocation" type="D2LogicalModel:AlertCLocation">
    <xs:annotation>
      <xs:documentation>Linear location defined by a specific Alert-C location.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="alertCLinearByCodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexType>
</xs:complexType>
<xs:complexType name="AlertCLocation">
  <xs:annotation>
    <xs:documentation>Identification of a specific point, linear or area location in an ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of ALERT-C location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specificLocation" type="D2LogicalModel:AlertCLocationCode" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique code within the ALERT-C location table which identifies the specific point, linear or area
location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AlertCLocationCode">
  <xs:annotation>
    <xs:documentation>A positive integer number (between 1 and 63,487) which uniquely identifies a pre-defined Alert C location
defined within an Alert-C table.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="AlertCMethod2Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a road between two points, Primary and Secondary, which are pre-defined in an
ALERT-C location table. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the
Secondary point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod2PrimaryPointLocation" type="D2LogicalModel:AlertCMethod2PrimaryPointLocation" />
        <xs:element name="alertCMethod2SecondaryPointLocation" type="D2LogicalModel:AlertCMethod2SecondaryPointLocation" />
        <xs:element name="alertCMethod2LinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod2Point">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table
and which has an associated direction of traffic flow.</xs:documentation>

```

```

</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:AlertCPoint">
    <xs:sequence>
      <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
      <xs:element name="alertCMethod2PrimaryPointLocation" type="D2LogicalModel:AlertCMethod2PrimaryPointLocation" />
      <xs:element name="alertCMethod2PointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod2PrimaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Primary point) which is either a single point or at the downstream end of a linear road section. The point is specified by a reference to a point in a pre-defined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="alertCMethod2PrimaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod2SecondaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified by a reference to a point in a pre-defined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="alertCMethod2SecondaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod4Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a road between two points, Primary and Secondary, which are pre-defined ALERT-C locations plus offset distance. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the Secondary point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod4PrimaryPointLocation" type="D2LogicalModel:AlertCMethod4PrimaryPointLocation" />
        <xs:element name="alertCMethod4SecondaryPointLocation" type="D2LogicalModel:AlertCMethod4SecondaryPointLocation" />
        <xs:element name="alertCMethod4LinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod4Point">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table plus an offset distance and which has an associated direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCPoint">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod4PrimaryPointLocation" type="D2LogicalModel:AlertCMethod4PrimaryPointLocation" />
        <xs:element name="alertCMethod4PointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod4PrimaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Primary point) which is either a single point or at the downstream end of a linear road
section. The point is specified by a reference to a point in a pre-defined ALERT-C location table plus a non-negative offset
distance.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="offsetDistance" type="D2LogicalModel:OffsetDistance" />
    <xs:element name="alertCMethod4PrimaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod4SecondaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified
by a reference to a point in a pre-defined Alert-C location table plus a non-negative offset distance.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="offsetDistance" type="D2LogicalModel:OffsetDistance" />
    <xs:element name="alertCMethod4SecondaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCPoint" abstract="true">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a pre-defined ALERT-C location table and which
has an associated direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location
table number.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AmountOfMoney">
  <xs:annotation>
    <xs:documentation>A monetary value expressed to two decimal places.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Decimal">
    <xs:totalDigits value="8" />
    <xs:fractionDigits value="2" />
  </xs:restriction>
</xs:simpleType>

```

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</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Ampere">
  <xs:annotation>
    <xs:documentation>Ampere.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="Area">
  <xs:annotation>
    <xs:documentation>A geographic or geometric defined area which may be qualified by height information to provide additional
    geospatial discrimination (e.g. for snow in an area but only above a certain altitude).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="alertCArea" type="D2LogicalModel:AlertCArea" minOccurs="0" />
        <xs:element name="tpegAreaLocation" type="D2LogicalModel:TpegAreaLocation" minOccurs="0" />
        <xs:element name="areaExtension" type="D2LogicalModel:_AreaExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AreaDestination">
  <xs:annotation>
    <xs:documentation>The specification of the destination of a defined route or itinerary which is an area.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Destination">
      <xs:sequence>
        <xs:element name="area" type="D2LogicalModel:Area" />
        <xs:element name="areaDestinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AreaExtended">
  <xs:annotation>
    <xs:documentation>Extension class for area used in parking publication extension.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="namedArea" type="D2LogicalModel:NamedArea" minOccurs="0" />
    <xs:element name="polygonArea" type="D2LogicalModel:PolygonArea" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AreaOfInterestEnum">
  <xs:annotation>
    <xs:documentation>Types of areas of interest.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="continentWide">
      <xs:annotation>
        <xs:documentation>Area of the whole European continent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="national">
      <xs:annotation>
        <xs:documentation>Whole area of the specific country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:enumeration>
<xs:enumeration value="neighbouringCountries">
  <xs:annotation>
    <xs:documentation>Area of countries which are neighbouring the one specified.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notSpecified">
  <xs:annotation>
    <xs:documentation>Non specified area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regional">
  <xs:annotation>
    <xs:documentation>Area of the local region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AvailabilityEnum">
  <xs:annotation>
    <xs:documentation>An enumeration which states if something is available or not.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="available">
      <xs:annotation>
        <xs:documentation>The element in question is available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notAvailable">
      <xs:annotation>
        <xs:documentation>The element in question is not available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>There is no information about whether the element in question is available or not.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Boolean">
  <xs:annotation>
    <xs:documentation>Boolean has the value space required to support the mathematical concept of binary-valued logic: {true, false}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:boolean" />
</xs:simpleType>
<xs:simpleType name="CarriagewayEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors identifying specific carriageway details.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="connectingCarriageway">
      <xs:annotation>
        <xs:documentation>On the connecting carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="entrySlipRoad">
      <xs:annotation>
    
```

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    <xs:documentation>On the entry slip road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="exitSlipRoad">
  <xs:annotation>
    <xs:documentation>On the exit slip road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="flyover">
  <xs:annotation>
    <xs:documentation>On the flyover, i.e. the section of road passing over another.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandFeederRoad">
  <xs:annotation>
    <xs:documentation>On the left hand feeder road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandParallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the left hand parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mainCarriageway">
  <xs:annotation>
    <xs:documentation>On the main carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="oppositeCarriageway">
  <xs:annotation>
    <xs:documentation>On the opposite carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the adjacent parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandFeederRoad">
  <xs:annotation>
    <xs:documentation>On the right hand feeder road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandParallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the right hand parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roundabout">
  <xs:annotation>
    <xs:documentation>On the roundabout.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="serviceRoad">
  <xs:annotation>
    <xs:documentation>On the adjacent service road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="slipRoads">

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<xs:annotation>
  <xs:documentation>On the slip roads.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="underpass">
  <xs:annotation>
    <xs:documentation>On the underpass, i.e. the section of road passing under another.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Charge">
  <xs:annotation>
    <xs:documentation>A particular charge for a specified interval belonging a charge band.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="charge" type="D2LogicalModel:AmountOfMoney" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Charge for the specified interval (for vehicle of defined characteristics, if any specified) up to the maximum
        defined duration and during the defined period(s).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeInterval" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Interval for which the charge applies (e.g. charge applies for 2 hours (to specify in seconds)). If no interval
        is specified, the price is valid for the whole period (kind of flat fee).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeType" type="D2LogicalModel:ChargeTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of charge. Day- week- month- and year-charges can be specified without this enumeration by
        specifying the interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeTypeDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Additional description for this kind of charge type, especially if the enumeration does not
        fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="maxIterationsOfCharge" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This charge must not be applied more often within this charge band than specified in this attribute. Thus it is
        possible to specify the first hour for free, for example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="minIterationsOfCharge" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This charge must be applied within this charge band at least as often as specified in this attribute. Thus it is
        possible to specify the first hour in an expensive manner, for example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeOrderIndex" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A non-unique index which forms an order for applying charges, i.e. a charge may never be applied
        afterwards a charge with a higher index. For same indices there is no order-restriction. You can skip charges unless their
        'minIterationsOfCharge' is not > 0.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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<xs:element name="timePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0">
  <xs:annotation>
    <xs:documentation>The TimePeriodOfDay limits the validity of the charge to this period (e.g. night-tariffs).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ChargeBand">
  <xs:annotation>
    <xs:documentation>A charge band in accordance with the specified conditions, possibly up to a maximum duration, during a
    specified period and for a vehicle of specified characteristics (in case of parking).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chargeCurrency" type="D2LogicalModel:CurrencyEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A three-character code according to ISO 4217 for the currency in which the parking charge is specified (e.g.
        EUR, GBP, SEK, CZK).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="maximumDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum duration (e.g. of parking) for which the specified charge is applicable.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeBandName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name for this charge band.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Limitation to a set of special users.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="charge" type="D2LogicalModel:Charge" maxOccurs="unbounded" />
    <xs:element name="applicableForPeriod" type="D2LogicalModel:OverallPeriod" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Charge band limitation on a (complex) period, described by the validity model.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableForVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
    maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Charge band limitation on a set of vehicles described by their characteristics.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermit" type="D2LogicalModel:ParkingPermit" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="chargeBandExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ChargeBandByReference">
  <xs:annotation>
    <xs:documentation>Using (a) prior defined charge band(s), identified by its reference.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chargeBandReference" type="D2LogicalModel:_ChargeBandVersionedReference" minOccurs="1"

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maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A reference to a charge band.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargeBandByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ChargeTypeEnum">
  <xs:annotation>
    <xs:documentation>Charge type</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="minimum">
      <xs:annotation>
        <xs:documentation>Minimum price for the given interval.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="maximum">
      <xs:annotation>
        <xs:documentation>Maximum price for the given interval.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="additionalIntervalPrice">
      <xs:annotation>
        <xs:documentation>Price for all intervals following the first interval.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seasonTicket">
      <xs:annotation>
        <xs:documentation>Season ticket.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="temporaryPrice">
      <xs:annotation>
        <xs:documentation>Temporary price.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="firstIntervalPrice">
      <xs:annotation>
        <xs:documentation>Price for the first interval, e.g. the first hour. See also 'additional'.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="freeParking">
      <xs:annotation>
        <xs:documentation>Free Parking. Set charge to 0.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="flat">
      <xs:annotation>
        <xs:documentation>Flat fee.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">

```

```

    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ChargingStationUsageTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of usage for electric charging station(s).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="electricVehicle">
      <xs:annotation>
        <xs:documentation>Charging of electric vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="motorhomeOrCaravanSupply">
      <xs:annotation>
        <xs:documentation>Supply for motorhomes or caravans.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="electricBikeOrMotorcycle">
      <xs:annotation>
        <xs:documentation>Charging of E-Bikes or E-Motorcycles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lorryPowerConsumption">
      <xs:annotation>
        <xs:documentation>Supply for lorries with power consumption, e.g. for refrigerated goods transports.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="electricalDevices">
      <xs:annotation>
        <xs:documentation>Provides a plug for electrical devices (e.g. shaver, mobile phones, hair dryer, ...)</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other usage for the electric charging stations.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ComparisonOperatorEnum">
  <xs:annotation>
    <xs:documentation>Logical comparison operations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="equalTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThanOrEqualTo">

```

```

<xs:annotation>
  <xs:documentation>Logical comparison operator of "greater than or equal to".</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="lessThan">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "less than".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lessThanOrEqualTo">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "less than or equal to".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ConfidentialityValueEnum">
  <xs:annotation>
    <xs:documentation>Values of confidentiality.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="internalUse">
      <xs:annotation>
        <xs:documentation>For internal use only of the recipient organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noRestriction">
      <xs:annotation>
        <xs:documentation>No restriction on usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthorities">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesAndTrafficOperators">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities and traffic operators.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndPublishers">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators and publishers (service providers).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndVms">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators, publishers (service providers) and variable message signs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="Contact">
  <xs:annotation>
    <xs:documentation>Address and contact information about some person, service or the parking site, provided in detail or via reference.</xs:documentation>
  </xs:annotation>

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```

</xs:annotation>
<xs:sequence>
  <xs:element name="contactUnknown" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>When true, the contact for the selected role and/or timeframe is unknown. Don't use the specialisations in
this case.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="contactNotDefined" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>When true, there is currently no contact defined for the selected role and/or timeframe. Don't use the
specialisations in this case.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="validityOfContact" type="D2LogicalModel:OverallPeriod" minOccurs="0" />
  <xs:element name="contactExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ContactByReference">
  <xs:annotation>
    <xs:documentation>Contact information that is addressed via a reference.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Contact">
      <xs:sequence>
        <xs:element name="contactReference" type="D2LogicalModel:_ContactDetailsVersionedReference" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Contact information provided by a reference.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="contactByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ContactDetails">
  <xs:annotation>
    <xs:documentation>Details for some person, service or the parking site itself, especially address information.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Contact">
      <xs:sequence>
        <xs:element name="contactOrganisationName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Name of the organisation or service. Do not use this attribute in combination with role
"parkingSiteAddress".</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="contactPersonName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Name of the contact person.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="contactPersonFirstName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>First name of the contact person.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

<xs:element name="contactPersonPosition" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The position of the contact person.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsLanguage" type="D2LogicalModel:Language" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Language(s) this contact is able to speak resp. understand.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsAddress" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Complete address of the contact. Alternatively use the separate fields to describe the
address.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsStreet" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Street of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsHouseNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="2">
  <xs:annotation>
    <xs:documentation>House number of the contact. Supports a multiplicity up to two, to specify lower and upper
numbers.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsPostcode" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Postcode of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsCity" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>City of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsTelephoneNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Telephone Number of contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsFax" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Fax of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsEMail" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>E-Mail address of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>

```

```

    <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
    further relevant information may be obtained.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsLogoUrl" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Url to define a logo of this contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="available24hours" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies if the availability is 24 hours a day. If omitted, this information is unknown or
    heterogeneous.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsResponsibility" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Specification of what service or equipment the contact is responsible for.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsMoreInfo" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Additional information relating to the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publishingAgreement" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Indication, whether the contact accepted publishing its contact information.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsOwnership" type="D2LogicalModel:OwnershipTypeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Information if the contact in question is a private or public institution.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
<xs:element name="contactDetailsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="CountryEnum">
  <xs:annotation>
    <xs:documentation>List of countries.</xs:documentation>
  </xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="at">
    <xs:annotation>
      <xs:documentation>Austria</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="be">
    <xs:annotation>
      <xs:documentation>Belgium</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="bg">
  <xs:annotation>
    <xs:documentation>Bulgaria</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ch">
  <xs:annotation>
    <xs:documentation>Switzerland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cs">
  <xs:annotation>
    <xs:documentation>Serbia and Montenegro</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cy">
  <xs:annotation>
    <xs:documentation>Cyprus</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cz">
  <xs:annotation>
    <xs:documentation>Czech Republic</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="de">
  <xs:annotation>
    <xs:documentation>Germany</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dk">
  <xs:annotation>
    <xs:documentation>Denmark</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ee">
  <xs:annotation>
    <xs:documentation>Estonia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="es">
  <xs:annotation>
    <xs:documentation>Spain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fi">
  <xs:annotation>
    <xs:documentation>Finland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fo">
  <xs:annotation>
    <xs:documentation>Faroe Islands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fr">
  <xs:annotation>
    <xs:documentation>France</xs:documentation>
  </xs:annotation>
```



```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="gb">
  <xs:annotation>
    <xs:documentation>Great Britain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gg">
  <xs:annotation>
    <xs:documentation>Guernsey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gi">
  <xs:annotation>
    <xs:documentation>Gibraltar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gr">
  <xs:annotation>
    <xs:documentation>Greece</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hr">
  <xs:annotation>
    <xs:documentation>Croatia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hu">
  <xs:annotation>
    <xs:documentation>Hungary</xs:documentation>
  </xs:annotation>
</xs:enumeration>
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  <xs:annotation>
    <xs:documentation>Ireland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="im">
  <xs:annotation>
    <xs:documentation>Isle Of Man</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="is">
  <xs:annotation>
    <xs:documentation>Iceland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="it">
  <xs:annotation>
    <xs:documentation>Italy</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="je">
  <xs:annotation>
    <xs:documentation>Jersey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="li">
  <xs:annotation>

```

```
<xs:documentation>Lichtenstein</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="lt">
  <xs:annotation>
    <xs:documentation>Lithuania</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lu">
  <xs:annotation>
    <xs:documentation>Luxembourg</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lv">
  <xs:annotation>
    <xs:documentation>Latvia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ma">
  <xs:annotation>
    <xs:documentation>Morocco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mc">
  <xs:annotation>
    <xs:documentation>Monaco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mk">
  <xs:annotation>
    <xs:documentation>Macedonia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mt">
  <xs:annotation>
    <xs:documentation>Malta</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nl">
  <xs:annotation>
    <xs:documentation>Netherlands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="no">
  <xs:annotation>
    <xs:documentation>Norway</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pl">
  <xs:annotation>
    <xs:documentation>Poland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pt">
  <xs:annotation>
    <xs:documentation>Portugal</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ro">
```

```

    <xs:annotation>
      <xs:documentation>Romania</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="se">
    <xs:annotation>
      <xs:documentation>Sweden</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="si">
    <xs:annotation>
      <xs:documentation>Slovenia</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="sk">
    <xs:annotation>
      <xs:documentation>Slovakia</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="sm">
    <xs:annotation>
      <xs:documentation>San Marino</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="tr">
    <xs:annotation>
      <xs:documentation>Turkey</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="va">
    <xs:annotation>
      <xs:documentation>Vatican City State</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="CubicMetres">
  <xs:annotation>
    <xs:documentation>A volumetric measure defined in cubic metres.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="CurrencyEnum">
  <xs:annotation>
    <xs:documentation>Three letter code defining the currency according to ISO 4217 (e.g. EUR for Euro). This enumeration only contains European currencies including the US dollar.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="eur">
      <xs:annotation>
        <xs:documentation>Euro</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="all">

```

```
<xs:annotation>
  <xs:documentation>Lek (Albania)</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="amd">
  <xs:annotation>
    <xs:documentation>Armeniam Dram</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="azn">
  <xs:annotation>
    <xs:documentation>Azerbaijani Manat</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bam">
  <xs:annotation>
    <xs:documentation>Convertible Mark (Bosnia and Herzogowina)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bgn">
  <xs:annotation>
    <xs:documentation>Bulgarian Lev</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="byr">
  <xs:annotation>
    <xs:documentation>Belarussian Ruble</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="chf">
  <xs:annotation>
    <xs:documentation>Swiss Franc</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="czk">
  <xs:annotation>
    <xs:documentation>Czech Koruna</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dkk">
  <xs:annotation>
    <xs:documentation>Danish Krone</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gbp">
  <xs:annotation>
    <xs:documentation>Pound Sterling</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gel">
  <xs:annotation>
    <xs:documentation>Lari (Georgia)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hrk">
  <xs:annotation>
    <xs:documentation>Croatian Kuna</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```
<xs:enumeration value="huf">
  <xs:annotation>
    <xs:documentation>Forint (Hungary)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="isk">
  <xs:annotation>
    <xs:documentation>Iceland Krona</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ltl">
  <xs:annotation>
    <xs:documentation>Litas (Lithuania)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mdl">
  <xs:annotation>
    <xs:documentation>Moldovan Leu</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mkd">
  <xs:annotation>
    <xs:documentation>Denar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nok">
  <xs:annotation>
    <xs:documentation>Norwegian Krone</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pln">
  <xs:annotation>
    <xs:documentation>Zloty</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ron">
  <xs:annotation>
    <xs:documentation>New Romanian Leu</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rsd">
  <xs:annotation>
    <xs:documentation>Serbian Dinar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rub">
  <xs:annotation>
    <xs:documentation>Russian Ruble</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sek">
  <xs:annotation>
    <xs:documentation>Swedish Krona</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="try">
  <xs:annotation>
    <xs:documentation>Turkish Lira</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:enumeration>
<xs:enumeration value="uah">
  <xs:annotation>
    <xs:documentation>Hryvnia (Ukraine)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="usd">
  <xs:annotation>
    <xs:documentation>US Dollar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Another currency.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:element name="d2LogicalModel" type="D2LogicalModel:D2LogicalModel">
  <xs:unique name="_d2LogicalModelParkingRouteDetailsConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingRouteDetails" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingTableConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingTable" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelContactDetailsConstraint">
    <xs:selector xpath="//D2LogicalModel:contactDetails" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingAccessConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingAccess" />
    <xs:field xpath="@id" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingRecordConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingRecord" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelChargeBandConstraint">
    <xs:selector xpath="//D2LogicalModel:chargeBand" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
</xs:element>
<xs:complexType name="D2LogicalModel">
  <xs:annotation>
    <xs:documentation>The DATEX II logical model comprising exchange, content payload and management sub-
models.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="exchange" type="D2LogicalModel:Exchange" />
    <xs:element name="payloadPublication" type="D2LogicalModel:PayloadPublication" minOccurs="0" />
    <xs:element name="d2LogicalModelExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>

```

```

<xs:attribute name="modelBaseVersion" use="required" fixed="2" />
</xs:complexType>
<xs:simpleType name="DangerousGoodsRegulationsEnum">
  <xs:annotation>
    <xs:documentation>Types of dangerous goods regulations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="adr">
      <xs:annotation>
        <xs:documentation>European agreement on the international carriage of dangerous goods on road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="iatalcao">
      <xs:annotation>
        <xs:documentation>Regulations covering the international transportation of dangerous goods issued by the International Air
Transport Association and the International Civil Aviation Organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="imolmdg">
      <xs:annotation>
        <xs:documentation>Regulations regarding the transportation of dangerous goods on ocean-going vessels issued by the
International Maritime Organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="railroadDangerousGoodsBook">
      <xs:annotation>
        <xs:documentation>International regulations concerning the international carriage of dangerous goods by
rail.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Date">
  <xs:annotation>
    <xs:documentation>A combination of year, month and day integer-valued properties plus an optional timezone property. It
represents an interval of exactly one day, beginning on the first moment of the day in the timezone, i.e. '00:00:00' up to but not
including '24:00:00'.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:date" />
</xs:simpleType>
<xs:simpleType name="DateTime">
  <xs:annotation>
    <xs:documentation>A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property
and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from
UTC.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:dateTime" />
</xs:simpleType>
<xs:simpleType name="DayEnum">
  <xs:annotation>
    <xs:documentation>Days of the week.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="monday">
      <xs:annotation>
        <xs:documentation>Monday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tuesday">

```

```

<xs:annotation>
  <xs:documentation>Tuesday.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="wednesday">
  <xs:annotation>
    <xs:documentation>Wednesday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="thursday">
  <xs:annotation>
    <xs:documentation>Thursday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="friday">
  <xs:annotation>
    <xs:documentation>Friday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="saturday">
  <xs:annotation>
    <xs:documentation>Saturday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sunday">
  <xs:annotation>
    <xs:documentation>Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DayWeekMonth">
  <xs:annotation>
    <xs:documentation>Specification of periods defined by the intersection of days, weeks and months.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableDay" type="D2LogicalModel:DayEnum" minOccurs="0" maxOccurs="7">
      <xs:annotation>
        <xs:documentation>Applicable day of the week. "All days of the week" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableWeek" type="D2LogicalModel:WeekOfMonthEnum" minOccurs="0" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableMonth" type="D2LogicalModel:MonthOfYearEnum" minOccurs="0" maxOccurs="12">
      <xs:annotation>
        <xs:documentation>Applicable month of the year. "All months of the year" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dayWeekMonthExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Decimal">
  <xs:annotation>

```



```

    <xs:documentation>A decimal number whose value space is the set of numbers that can be obtained by multiplying an integer by
    a non-positive power of ten, i.e., expressible as  $i \times 10^{-n}$  where  $i$  and  $n$  are integers and  $n >= 0$ .</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:decimal" />
</xs:simpleType>
<xs:complexType name="DedicatedAccess">
  <xs:annotation>
    <xs:documentation>Reference to an access of any type (vehicles, pedestrian, ...).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="dedicatedAccess" type="D2LogicalModel:_ParkingAccessReference" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further
        characteristics can be specified for those objects.</xs:documentation>
      </xs:annotation>
      </xs:element>
      <xs:element name="distanceFromParkingSpace" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"
      maxOccurs="1">
        <xs:annotation>
          <xs:documentation>Distance from this access to the parking space or group of parking spaces. Especially interesting for
          handicapped people on the one hand or in case of the need of changing the side of a motorway.</xs:documentation>
        </xs:annotation>
        </xs:element>
      </xs:element>
      <xs:element name="dedicatedAccessExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
<xs:complexType name="Destination" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification a destination. This may be either a point location or an area location.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="destinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Dimension">
  <xs:annotation>
    <xs:documentation>A component that provides dimension information. The product of width and height must not be necessarily be
    the square footage (e.g. in multi-storey buildings or when some zones are not part of the square footage).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="dimensionLength" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Length.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="dimensionWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Width.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="dimensionHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Height.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="dimensionUsableArea" type="D2LogicalModel:SquareMetres" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The area measured in square metres, that is available for some specific purpose.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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</xs:element>
<xs:element name="dimensionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="DirectionEnum">
  <xs:annotation>
    <xs:documentation>List of directions of travel.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allDirections">
      <xs:annotation>
        <xs:documentation>All directions (where more than two are applicable) at this point on the road network.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bothWays">
      <xs:annotation>
        <xs:documentation>Both directions that are applicable at this point on the road network.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="clockwise">
      <xs:annotation>
        <xs:documentation>Clockwise.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anticlockwise">
      <xs:annotation>
        <xs:documentation>Anti-clockwise.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="innerRing">
      <xs:annotation>
        <xs:documentation>Inner ring direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="outerRing">
      <xs:annotation>
        <xs:documentation>Outer ring direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="northBound">
      <xs:annotation>
        <xs:documentation>North bound general direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="northEastBound">
      <xs:annotation>
        <xs:documentation>North east bound general direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="eastBound">
      <xs:annotation>
        <xs:documentation>East bound general direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="southEastBound">
      <xs:annotation>
        <xs:documentation>South east bound general direction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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<xs:enumeration value="southBound">
  <xs:annotation>
    <xs:documentation>South bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="southWestBound">
  <xs:annotation>
    <xs:documentation>South west bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="westBound">
  <xs:annotation>
    <xs:documentation>West bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="northWestBound">
  <xs:annotation>
    <xs:documentation>North west bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inboundTowardsTown">
  <xs:annotation>
    <xs:documentation>Heading towards town centre direction of travel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="outboundFromTown">
  <xs:annotation>
    <xs:documentation>Heading out of or away from the town centre direction of travel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Direction is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="opposite">
  <xs:annotation>
    <xs:documentation>Opposite direction to the normal direction of flow at this point on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DistanceAlongLinearElement" abstract="true">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element either measured from the start node or a defined referent on that
linear element, where the start node is relative to the element definition rather than the direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="distanceAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="DistanceFromLinearElementReferent">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from a "from referent" on the linear element, in the sense

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relative to the linear element definition rather than the direction of traffic flow or optionally towards a "towards referent".</xs:documentation>

```

</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
    <xs:sequence>
      <xs:element name="distanceAlong" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>A measure of distance along a linear element.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="fromReferent" type="D2LogicalModel:Referent">
        <xs:annotation>
          <xs:documentation>A known location along the linear element from which the distanceAlong is measured, termed the
"fromReferent" in ISO 19148. </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="towardsReferent" type="D2LogicalModel:Referent" minOccurs="0">
        <xs:annotation>
          <xs:documentation>A known location along the linear element towards which the distanceAlong is measured, termed the
"towardsReferent" in ISO 19148. </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="distanceFromLinearElementReferentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
<xs:complexType name="DistanceFromLinearElementStart">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from the start node of the linear element, where start
node is relative to the element definition rather than the direction of traffic flow. </xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="distanceAlong" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measure of distance along a linear element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="distanceFromLinearElementStartExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ElectricCharging">
  <xs:annotation>
    <xs:documentation>Additional information for the equipment 'electricChargingStation'. This component refers to the number of
charging stations specified in the attribute 'numberOfEquipmentOrServiceFacilities'. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chargingStationUsageType" type="D2LogicalModel:ChargingStationUsageTypeEnum" minOccurs="1"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Usage type of the electric charging station(s).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargingStationModelType" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">

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    <xs:annotation>
      <xs:documentation>Model type of the electric charging station(s). Brand or company information can be specified in
'ParkingEquipmentOrServiceFacility'. For more than one type of model, use several instances of
'ParkingEquipmentOrServiceFacility'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="maximumCurrent" type="D2LogicalModel:Ampere" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The maximum current of the electric charging station(s) (in Ampere).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="voltage" type="D2LogicalModel:Volt" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Available Voltage(s) of the electric charging station(s).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="chargingStationConnectorType" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Connector type(s) for the electric charging station(s).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="numberOfChargingPoints" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Number of vehicles or devices, which can be charged simultaneously (sum over all electric charging stations
specified with the 'numberOf...' attribute). If omitted, 1 charging point per station is assumed.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="electricChargingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Equipment">
  <xs:annotation>
    <xs:documentation>One type of equipment, that is available on the parking site.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingEquipmentOrServiceFacility">
      <xs:sequence>
        <xs:element name="equipmentType" type="D2LogicalModel:EquipmentTypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>One type of equipment, that is available on the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="electricCharging" type="D2LogicalModel:ElectricCharging" minOccurs="0" />
        <xs:element name="equipmentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="EquipmentTypeEnum">
  <xs:annotation>
    <xs:documentation>Equipment available on the parking or parking space or grouped parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="toilet">
      <xs:annotation>
        <xs:documentation>Indicates, whether there are toilets available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```
<xs:enumeration value="shower">
  <xs:annotation>
    <xs:documentation>Indicates, whether there are shower facilities available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="informationPoint">
  <xs:annotation>
    <xs:documentation>An information point with employees.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="informatonStele">
  <xs:annotation>
    <xs:documentation>An unmanned information point.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="internetTerminal">
  <xs:annotation>
    <xs:documentation>Public internet terminal. Charges may be specified using the TariffsAndPayment
section.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="internetWireless">
  <xs:annotation>
    <xs:documentation>Public wireless internet. Specifying an amount would be the number of hotspots/access points. Charges
may be specified using the TariffsAndPayment section.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payDesk">
  <xs:annotation>
    <xs:documentation>A possibility to pay for parking (with employees).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="paymentMachine">
  <xs:annotation>
    <xs:documentation>A parking ticket machine.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cashMachine">
  <xs:annotation>
    <xs:documentation>Cash machine.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vendingMachine">
  <xs:annotation>
    <xs:documentation>A vending machine for snacks, coffee etc. (without manpower).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="faxMachineOrService">
  <xs:annotation>
    <xs:documentation>A possibility to send and/or receive faxes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="copyMachineOrService">
  <xs:annotation>
    <xs:documentation>A possibility to create copies of documents.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="safeDeposit">
  <xs:annotation>
```

```

    <xs:documentation>A possibility to store valuable possession in a safe way. </xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="luggageLocker">
  <xs:annotation>
    <xs:documentation>Possibility to deposit luggage in a safe way.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicPhone">
  <xs:annotation>
    <xs:documentation>Indicates, whether there's a public telephone available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicCoinPhone">
  <xs:annotation>
    <xs:documentation>Indicates, whether there's a public telephone available that can be used with coins.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicCardPhone">
  <xs:annotation>
    <xs:documentation>Indicates, whether there's a public telephone available that can be used with a card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="elevator">
  <xs:annotation>
    <xs:documentation>Indication of the availability of elevators.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="picnicFacilities">
  <xs:annotation>
    <xs:documentation>Indication of whether any picnicking facilities, such as tables, chairs and shaded areas, are
available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dumpingStation">
  <xs:annotation>
    <xs:documentation>Possibility to get rid of sewerage (especially for motorhomes).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="freshWater">
  <xs:annotation>
    <xs:documentation>Possibility to get fresh water (e.g. for motorhomes) - toilets and showers etc. are not intended
here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="wasteDisposal">
  <xs:annotation>
    <xs:documentation>Possibility to get rid of waste in a legal way (e.g. for truckers or motorhomes). Normal refuse bins are not
intended here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuseBin">
  <xs:annotation>
    <xs:documentation>Refuse bins for small amounts of garbage (see also 'wasteDisposal').</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="iceFreeScaffold">
  <xs:annotation>
    <xs:documentation>A technical equipment to remove ice and snow from the roof of lorries.</xs:documentation>
  </xs:annotation>

```

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="playground">
  <xs:annotation>
    <xs:documentation>A playground for children.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electricChargingStation">
  <xs:annotation>
    <xs:documentation>For charging vehicles, motorhome supply etc. The 'numberOf...' attribute specifies the number of charging
stations. You may specify the number of charging points and further information with component
'ElectricCharging'.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bikeParking">
  <xs:annotation>
    <xs:documentation>Bike parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tollTerminal">
  <xs:annotation>
    <xs:documentation>A terminal, where toll charges can be paid manually (this does not mean a toll gate on the
road)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="defibrillator">
  <xs:annotation>
    <xs:documentation>Medical equipment to provide first aid after heart attacks.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="firstAidEquipment">
  <xs:annotation>
    <xs:documentation>Equipment to support first aid on injured people. Note that 'defibrillator' is a separate
literal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireHose">
  <xs:annotation>
    <xs:documentation>A hose for water transport in case of fire.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireExtinguisher">
  <xs:annotation>
    <xs:documentation>Fire extinguisher</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireHydrant">
  <xs:annotation>
    <xs:documentation>Fire hydrant</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>None.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other equipment. Use 'otherEquipmentOrServiceFacility' to specify it.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Exchange">
  <xs:annotation>
    <xs:documentation>Details associated with the management of the exchange between the supplier and the
client.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="keepAlive" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicator that this exchange is due to "keep alive" functionality.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="response" type="D2LogicalModel:ResponseEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the response that the supplier is returning to the requesting client.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="subscriptionReference" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique identifier of the client's subscription with the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="supplierIdentification" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="exchangeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ExternalReferencing">
  <xs:annotation>
    <xs:documentation>A location defined by reference to an external/other referencing system.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="externalLocationCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A code in the external referencing system which defines the location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="externalReferencingSystem" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the external/other location referencing system.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="externalReferencingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Float">
  <xs:annotation>
    <xs:documentation>A floating point number whose value space consists of the values  $m \times 2^e$ , where  $m$  is an integer whose
absolute value is less than  $2^{24}$ , and  $e$  is an integer between -149 and 104, inclusive.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:float" />
</xs:simpleType>

```

```
<xs:simpleType name="FuelType2Enum">
  <xs:annotation>
    <xs:documentation>Fuel types that are currently not supported in FuelTypeEnum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="all">
      <xs:annotation>
        <xs:documentation>All sort of fuel is accepted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol95Octane">
      <xs:annotation>
        <xs:documentation>Petrol with 95 octane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol98Octane">
      <xs:annotation>
        <xs:documentation>Petrol with 98 octane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrolLeaded">
      <xs:annotation>
        <xs:documentation>Leaded petrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrolUnleaded">
      <xs:annotation>
        <xs:documentation>Unleaded petrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The sort of fuel is not known.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="FuelTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of fuel used by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="battery">
      <xs:annotation>
        <xs:documentation>Battery.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="biodiesel">
      <xs:annotation>
        <xs:documentation>Biodiesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="diesel">
      <xs:annotation>
```

```

    <xs:documentation>Diesel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dieselBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Diesel and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ethanol">
  <xs:annotation>
    <xs:documentation>Ethanol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hydrogen">
  <xs:annotation>
    <xs:documentation>Hydrogen.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquidGas">
  <xs:annotation>
    <xs:documentation>Liquid gas of any type including LPG.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lpg">
  <xs:annotation>
    <xs:documentation>Liquid petroleum gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="methane">
  <xs:annotation>
    <xs:documentation>Methane gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Petrol and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GenericPublication">
  <xs:annotation>
    <xs:documentation>A publication used to make level B extensions at the publication level.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">
      <xs:sequence>
        <xs:element name="genericPublicationName" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The name of the generic publication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="genericPublicationExtension" type="D2LogicalModel:_GenericPublicationExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="GrossWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Gross weight characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossVehicleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The gross weight of the vehicle and its load, including any trailers.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfLocations" abstract="true">
  <xs:annotation>
    <xs:documentation>One or more physically separate locations. Multiple locations may be related, as in an itinerary (or route), or may be unrelated. It is not for identifying the same physical location using different Location objects for different referencing systems.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="groupOfLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfParkingSites">
  <xs:annotation>
    <xs:documentation>A logical composition of parking sites with aggregated properties (e.g. number of spaces). Examples: Urban parking area "West" or all truck parkings along a motorway. The included parking sites may -but must not- be specified as subcomponents.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecord">
      <xs:sequence>
        <xs:element name="groupOfParkingSitesType" type="D2LogicalModel:GroupOfParkingSitesTypeEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of this group of parking sites.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteByReference" type="D2LogicalModel:_ParkingRecordVersionedReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Parking sites of this collection defined by reference.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSite" type="D2LogicalModel:ParkingSite" minOccurs="0" maxOccurs="unbounded" />
        <xs:element name="groupOfParkingSitesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="GroupOfParkingSitesTypeEnum">

```

```

<xs:annotation>
  <xs:documentation>The type of this group of parking sites.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="parkingArea">
    <xs:annotation>
      <xs:documentation>A parking area in urban environment, for example all parkings sites in the western
centre.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="truckParkingPriorityZone">
    <xs:annotation>
      <xs:documentation>This group is describing a truck parking priority zone according to the EU regulation.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="aggregationOfInformation">
    <xs:annotation>
      <xs:documentation>The main purpose of this group is to give summarized information of all encapsulated parking sites (e.g.
number of spaces in total).</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="inhabitantZone">
    <xs:annotation>
      <xs:documentation>This group is describing an inhabitant zone.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GroupOfParkingSpaces">
  <xs:annotation>
    <xs:documentation>A group of parking spaces. All information provided has to be identical for all places in this group. Can also be
used just to give the number of lorry parkings, for example. 'GroupOfParkingSpaces' may be multiple defined or include each
other.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSpaceBasics">
      <xs:sequence>
        <xs:element name="parkingNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Number of parking spaces (attribute is used for a parking record as well as for a group of parking
spaces).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingTypeOfGroup" type="D2LogicalModel:ParkingTypeOfGroup" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Defines the type of this group specification.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="identicalToGroup" type="D2LogicalModel:IndexReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'GroupOfParkingSpaces', which is identical from a local point of view. To be
used when defining mixed parking areas with different time slots.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="realSubsetOfGroup" type="D2LogicalModel:IndexReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'GroupOfParkingSpaces', which is a real superset from a local point of view.
To be used when defining mixed parking areas with different time slots.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:element>
<xs:element name="minimumParkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Lower dimension boundaries for all spaces within the group. Note that there must not exist a space with
this dimension, but each space's dimension values must be equal or higher.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dimensionOfGroup" type="D2LogicalModel:Dimension" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Dimension of a virtual rectangle encapsulating the group of parking spaces. Use 'dimensionUsableArea'
to define the total space available for parking within this group. Do not use 'dimensionHeight'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="maximumParkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Dimension of the largest space within this group (i.e. there must be at least one space of this dimension).
If the comparison of dimension values is not unique, the length is decisive.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSpace" type="D2LogicalModel:_GroupOfParkingSpacesParkingSpaceIndexParkingSpace"
minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
  <xs:element name="groupOfParkingSpacesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="HazardousMaterials">
  <xs:annotation>
    <xs:documentation>Details of hazardous materials.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chemicalName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The chemical name of the hazardous substance carried by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsFlashPoint" type="D2LogicalModel:TemperatureCelsius" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The temperature at which the vapour from a hazardous substance will ignite in air.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsRegulations" type="D2LogicalModel:DangerousGoodsRegulationsEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The code defining the regulations, international or national, applicable for a means of
transport.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeIdentification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The dangerous goods description code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeVersionNumber" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The version/revision number of date of issuance of the hazardous material code used.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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<xs:element name="hazardSubstanceItemPageNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A number giving additional hazard code classification of a goods item within the applicable dangerous
goods regulation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tremCardNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The identification of a transport emergency card giving advice for emergency actions.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="undgNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A unique serial number assigned within the United Nations to substances and articles contained in a list of
the dangerous goods most commonly carried.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="volumeOfDangerousGoods" type="D2LogicalModel:CubicMetres" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The volume of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="weightOfDangerousGoods" type="D2LogicalModel:Tonnes" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The weight of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="hazardousMaterialsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaderInformation">
  <xs:annotation>
    <xs:documentation>Management information relating to the data contained within a publication.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="areaOfInterest" type="D2LogicalModel:AreaOfInterestEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent of the geographic area to which the related information should be
distributed.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="confidentiality" type="D2LogicalModel:ConfidentialityValueEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent to which the related information may be circulated, according to the recipient type. Recipients
must comply with this confidentiality statement.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="informationStatus" type="D2LogicalModel:InformationStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the related information (real, test, exercise ....).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="urgency" type="D2LogicalModel:UrgencyEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This indicates the urgency with which a message recipient or Client should distribute the enclosed
information. Urgency particularly relates to functions within RDS-TMC applications. </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="headerInformationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />

```

```

</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaviestAxleWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Weight characteristic of the heaviest axle on the vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The weight of the heaviest axle on the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="HeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Height characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="HeightGradeEnum">
  <xs:annotation>
    <xs:documentation>List of height or vertical gradings of road sections.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="aboveGrade">
      <xs:annotation>
        <xs:documentation>Above or over the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atGrade">
      <xs:annotation>
        <xs:documentation>At the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="belowGrade">
      <xs:annotation>
        <xs:documentation>Below or under the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```



```

</xs:restriction>
</xs:simpleType>
<xs:simpleType name="IndexReference">
  <xs:annotation>
    <xs:documentation>A reference to an object given by its index qualifier.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:String" />
</xs:simpleType>
<xs:simpleType name="InformationStatusEnum">
  <xs:annotation>
    <xs:documentation>Status of the related information (i.e. real, test or exercise).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="real">
      <xs:annotation>
        <xs:documentation>The information is real. It is not a test or exercise.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which is for testing security.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="technicalExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which includes tests of associated technical
subsystems.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="test">
      <xs:annotation>
        <xs:documentation>The information is part of a test for checking the exchange of this type of information.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Integer">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {-2147483648, -2147483647, -2147483646, ..., -2, -1, 0, 1, 2,
..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:integer" />
</xs:simpleType>
<xs:complexType name="InternationalIdentifier">
  <xs:annotation>
    <xs:documentation>An identifier/name whose range is specific to the particular country.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="nationalIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier or name unique within the specified country.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="internationalIdentifierExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />

```

```

</xs:sequence>
</xs:complexType>
<xs:complexType name="InterUrbanParkingSite">
  <xs:annotation>
    <xs:documentation>A parking site in an interurban context.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSite">
      <xs:sequence>
        <xs:element name="interUrbanParkingSiteLocation" type="D2LogicalModel:InterUrbanParkingSiteLocationEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Defines whether the interurban parking site is located in or nearby a motorway context, is a layby or on-
street parking.</xs:documentation>
          </xs:annotation>
          </xs:element>
          <xs:element name="interUrbanParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:simpleType name="InterUrbanParkingSiteLocationEnum">
    <xs:annotation>
      <xs:documentation>Location of the truck or motorway related parking.</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:enumeration value="motorway">
        <xs:annotation>
          <xs:documentation>The parking is located directly on a motorway or a similar type of road.</xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="nearbyMotorway">
        <xs:annotation>
          <xs:documentation>The parking is located with some distance to a motorway or a similar type of road but focussed on travellers
from this motorway.</xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="layBy">
        <xs:annotation>
          <xs:documentation>An area along a road that offers temporary parking.</xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="onStreet">
        <xs:annotation>
          <xs:documentation>Vehicles are parking on the roadside.</xs:documentation>
        </xs:annotation>
      </xs:enumeration>
      <xs:enumeration value="other">
        <xs:annotation>
          <xs:documentation>The parking is located somewhere else.</xs:documentation>
        </xs:annotation>
      </xs:enumeration>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="Itinerary" abstract="true">
    <xs:annotation>
      <xs:documentation>Multiple (i.e. more than one) physically separate locations arranged as an ordered set that defines an itinerary
or route.</xs:documentation>
    </xs:annotation>
  </xs:complexType>

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```

<xs:complexContent>
  <xs:extension base="D2LogicalModel:GroupOfLocations">
    <xs:sequence>
      <xs:element name="routeDestination" type="D2LogicalModel:Destination" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>Destination of a route or final location in an itinerary.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="itineraryExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="ItineraryByIndexedLocations">
  <xs:annotation>
    <xs:documentation>Multiple physically separate locations arranged as an ordered set that defines an itinerary or route. The index
qualifier indicates the order.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Itinerary">
      <xs:sequence>
        <xs:element name="locationContainedInItinerary" type="D2LogicalModel:_LocationContainedInItinerary" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A location contained in an itinerary (i.e. an ordered set of locations defining a route or
itinerary).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="itineraryByIndexedLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ItineraryByReference">
  <xs:annotation>
    <xs:documentation>Multiple (i.e. more than one) physically separate locations which are ordered that constitute an itinerary or
route where they are defined by reference to a predefined itinerary.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Itinerary">
      <xs:sequence>
        <xs:element name="predefinedItineraryReference" type="D2LogicalModel:_PredefinedItineraryVersionedReference"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned instance of a predefined itinerary as specified in a
PredefinedLocationsPublication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="itineraryByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="Junction">
  <xs:annotation>
    <xs:documentation>Junction (on a highway), can also be an interchange or if applicable also a motorway service station (see
junctionClassification).</xs:documentation>
  </xs:annotation>
  <xs:sequence>

```

```

<xs:element name="junctionClassification" type="D2LogicalModel:JunctionClassificationEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Explicit type of junction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="junctionName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Name of the junction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="junctionNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of the junction, might also include letters (example: 23A).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="motorway" type="D2LogicalModel:Road" minOccurs="0">
  <xs:annotation>
    <xs:documentation>A detailed identification of the motorway the junction belongs to.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="destinationMotorway" type="D2LogicalModel:Road" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>In case of any type of intersection, the destination motorway(s) can be defined.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="junctionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="JunctionClassificationEnum">
  <xs:annotation>
    <xs:documentation>Explicit type of a junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="threeWayInterchange">
      <xs:annotation>
        <xs:documentation>One motorway merging into another (with three legs in total).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="interchange">
      <xs:annotation>
        <xs:documentation>Usually two crossing motorways (four legs, but can be even more).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="motorwayConnection">
      <xs:annotation>
        <xs:documentation>Beginning or end of a motorway (e.g. changeover to smaller road).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="junction">
      <xs:annotation>
        <xs:documentation>Entrance and exit on a motorway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="temporaryJunction">
      <xs:annotation>
        <xs:documentation>Entrance and exit on a motorway, reserved either for emergency and service or on a temporary
basis.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="borderCrossing">
  <xs:annotation>
    <xs:documentation>Motorway crossing a border (between counties, countries, states, ...).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="junctionInOneDirection">
  <xs:annotation>
    <xs:documentation>Entry and Exit on a motorway, where just one direction of the motorway is accessible.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="operationalServiceJunction">
  <xs:annotation>
    <xs:documentation>Junction accessible only for operational services.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LABELSecurityLevelEnum">
  <xs:annotation>
    <xs:documentation>Security level defined by the LABEL project http://truckparkinglabel.eu.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>None.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel1">
      <xs:annotation>
        <xs:documentation>Providing the basics.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel2">
      <xs:annotation>
        <xs:documentation>Technical measures to improve security.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel3">
      <xs:annotation>
        <xs:documentation>Security measures are combined, Access of persons restricted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel4">
      <xs:annotation>
        <xs:documentation>Real time monitoring of vehicles and persons by professional staff.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel5">
      <xs:annotation>
        <xs:documentation>Verification of vehicles and persons by professional staff, site manned around the
clock.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">

```

```
<xs:annotation>
  <xs:documentation>Unknown.</xs:documentation>
</xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LABELServiceLevelEnum">
  <xs:annotation>
    <xs:documentation>Service level defined by the LABEL project http://truckparkinglabel.eu.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>None.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel1">
      <xs:annotation>
        <xs:documentation>Providing the basics.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel2">
      <xs:annotation>
        <xs:documentation>Also providing washing facilities and a more convenient lay-out of the parking area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel3">
      <xs:annotation>
        <xs:documentation>Providing service for personal hygiene and shop/ fuel station.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel4">
      <xs:annotation>
        <xs:documentation>Providing full service for driver and vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel5">
      <xs:annotation>
        <xs:documentation>Providing the high end of comfort levels.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LaneEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors identifying specific lanes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allLanesCompleteCarriageway">
      <xs:annotation>
        <xs:documentation>In all lanes of the carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="busLane">
```

```

<xs:annotation>
  <xs:documentation>In the bus lane.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="busStop">
  <xs:annotation>
    <xs:documentation>In the bus stop lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carPoolLane">
  <xs:annotation>
    <xs:documentation>In the carpool lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="centralReservation">
  <xs:annotation>
    <xs:documentation>On the central median separating the two directional carriageways of the highway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="crawlerLane">
  <xs:annotation>
    <xs:documentation>In the crawler lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="emergencyLane">
  <xs:annotation>
    <xs:documentation>In the emergency lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="escapeLane">
  <xs:annotation>
    <xs:documentation>In the escape lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="expressLane">
  <xs:annotation>
    <xs:documentation>In the express lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hardShoulder">
  <xs:annotation>
    <xs:documentation>On the hard shoulder.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyVehicleLane">
  <xs:annotation>
    <xs:documentation>In the heavy vehicle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane1">
  <xs:annotation>
    <xs:documentation>In the first lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane2">
  <xs:annotation>
    <xs:documentation>In the second lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```
<xs:enumeration value="lane3">
  <xs:annotation>
    <xs:documentation>In the third lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane4">
  <xs:annotation>
    <xs:documentation>In the fourth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane5">
  <xs:annotation>
    <xs:documentation>In the fifth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane6">
  <xs:annotation>
    <xs:documentation>In the sixth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane7">
  <xs:annotation>
    <xs:documentation>In the seventh lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane8">
  <xs:annotation>
    <xs:documentation>In the eighth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane9">
  <xs:annotation>
    <xs:documentation>In the ninth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="layBy">
  <xs:annotation>
    <xs:documentation>In a lay-by.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandTurningLane">
  <xs:annotation>
    <xs:documentation>In the left hand turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftLane">
  <xs:annotation>
    <xs:documentation>In the left lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="localTrafficLane">
  <xs:annotation>
    <xs:documentation>In the local traffic lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="middleLane">
  <xs:annotation>
    <xs:documentation>In the middle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

</xs:enumeration>
<xs:enumeration value="opposingLanes">
  <xs:annotation>
    <xs:documentation>In the opposing lanes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overtakingLane">
  <xs:annotation>
    <xs:documentation>In the overtaking lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandTurningLane">
  <xs:annotation>
    <xs:documentation>In the right hand turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightLane">
  <xs:annotation>
    <xs:documentation>In the right lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rushHourLane">
  <xs:annotation>
    <xs:documentation>In the lane dedicated for use during the rush (peak) hour.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="setDownArea">
  <xs:annotation>
    <xs:documentation>In the area/lane reserved for passenger pick-up or set-down.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="slowVehicleLane">
  <xs:annotation>
    <xs:documentation>In the slow vehicle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="throughTrafficLane">
  <xs:annotation>
    <xs:documentation>In the through traffic lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tidalFlowLane">
  <xs:annotation>
    <xs:documentation>In the lane dedicated for use as a tidal flow lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="turningLane">
  <xs:annotation>
    <xs:documentation>In the turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="verge">
  <xs:annotation>
    <xs:documentation>On the verge.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Language">

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<xs:annotation>
  <xs:documentation>A language datatype, identifies a specified language by an ISO 639-1 2-alpha / ISO 639-2 3-alpha
code.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:language" />
</xs:simpleType>
<xs:complexType name="LengthCharacteristic">
  <xs:annotation>
    <xs:documentation>Length characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleLength" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The overall distance between the front and back of an individual vehicle, including the length of any trailers,
couplings, etc.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lengthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a single road with optional directionality defined between two points on the same road.
</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NetworkLocation">
      <xs:sequence>
        <xs:element name="tpegLinearLocation" type="D2LogicalModel:TpegLinearLocation" minOccurs="0" />
        <xs:element name="alertCLinear" type="D2LogicalModel:AlertCLinear" minOccurs="0" />
        <xs:element name="linearWithinLinearElement" type="D2LogicalModel:LinearWithinLinearElement" minOccurs="0" />
        <xs:element name="linearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="LinearElement">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object, consistent with ISO 19148 definitions. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="roadName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the road of which the linear element forms a part.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier/number of the road of which the linear element forms a part.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearElementReferenceModel" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The identifier of a road network reference model which segments the road network according to specific

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business rules.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElementReferenceModelVersion" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The version of the identified road network reference model.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElementNature" type="D2LogicalModel:LinearElementNatureEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>An indication of the nature of the linear element.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="LinearElementByCode">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object defined by its identifier or code in a road network reference model
(specified in LinearElement class) which segments the road network according to specific business rules.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:LinearElement">
      <xs:sequence>
        <xs:element name="linearElementIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>An identifier or code of a linear element (or link) in the road network reference model that is specified in
the LinearElement class. </xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="linearElementByCodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="LinearElementByPoints">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object defined by its start and end points.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:LinearElement">
      <xs:sequence>
        <xs:element name="startPointOfLinearElement" type="D2LogicalModel:Referent">
          <xs:annotation>
            <xs:documentation>The referent at a known location on the linear object which defines the start of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="intermediatePointOnLinearElement" type="D2LogicalModel:_IntermediatePointOnLinearElement"
minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A referent at a known location on the linear object which is neither the start or end of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endPointOfLinearElement" type="D2LogicalModel:Referent">
          <xs:annotation>
            <xs:documentation>The referent at a known location on the linear object which defines the end of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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    </xs:annotation>
  </xs:element>
  <xs:element name="linearElementByPointsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="LinearElementNatureEnum">
  <xs:annotation>
    <xs:documentation>List of indicative natures of linear elements.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="road">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="roadSection">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a section of a road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="slipRoad">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a slip road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LinearReferencingDirectionEnum">
  <xs:annotation>
    <xs:documentation>Directions of traffic flow relative to the direction in which the linear element is defined.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="both">
      <xs:annotation>
        <xs:documentation>Indicates that both directions of traffic flow are affected by the situation or relate to the traffic
data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="opposite">
      <xs:annotation>
        <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the
opposite sense to the direction in which the linear element is defined.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aligned">
      <xs:annotation>
        <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the same
sense as the direction in which the linear element is defined.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>

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    <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is
unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="LinearWithinLinearElement">
  <xs:annotation>
    <xs:documentation>A linear section along a linear element where the linear element is either a part of or the whole of a linear
object (i.e. a road), consistent with ISO 19148 definitions.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="administrativeAreaOfLinearSection" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the road administration area which contains the specified linear
section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionBoundOnLinearSection" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow on the linear section in terms of general destination
direction.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionRelativeOnLinearSection" type="D2LogicalModel:LinearReferencingDirectionEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow on the linear section relative to the direction in which the linear element is
defined.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightGradeOfLinearSection" type="D2LogicalModel:HeightGradeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of whether the linear section that is part of the linear element is at, above or below the normal
elevation of a linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade"
separation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearElement" type="D2LogicalModel:LinearElement" />
    <xs:element name="fromPoint" type="D2LogicalModel:DistanceAlongLinearElement">
      <xs:annotation>
        <xs:documentation>A point on the linear element that defines the start node of the linear section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="toPoint" type="D2LogicalModel:DistanceAlongLinearElement">
      <xs:annotation>
        <xs:documentation>A point on the linear element that defines the end node of the linear section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearWithinLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="LoadType2Enum">
  <xs:annotation>
    <xs:documentation>Loads that are currently not supported in loadType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="refrigeratedGoods">

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```
<xs:annotation>
  <xs:documentation>Refrigerated goods.</xs:documentation>
</xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of load carried by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abnormalLoad">
      <xs:annotation>
        <xs:documentation>A load that exceeds normal vehicle dimensions in terms of height, length, width, gross vehicle weight or
axle weight or any combination of these. Generally termed an "abnormal load".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ammunition">
      <xs:annotation>
        <xs:documentation>Ammunition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chemicals">
      <xs:annotation>
        <xs:documentation>Chemicals of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="combustibleMaterials">
      <xs:annotation>
        <xs:documentation>Combustible materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="corrosiveMaterials">
      <xs:annotation>
        <xs:documentation>Corrosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="debris">
      <xs:annotation>
        <xs:documentation>Debris of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="empty">
      <xs:annotation>
        <xs:documentation>No load.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="explosiveMaterials">
      <xs:annotation>
        <xs:documentation>Explosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="extraHighLoad">
      <xs:annotation>
        <xs:documentation>A load of exceptional height.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="extraLongLoad">
      <xs:annotation>
```

```

    <xs:documentation>A load of exceptional length.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraWideLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional width.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fuel">
  <xs:annotation>
    <xs:documentation>Fuel of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="glass">
  <xs:annotation>
    <xs:documentation>Glass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="goods">
  <xs:annotation>
    <xs:documentation>Any goods of a commercial nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hazardousMaterials">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a hazardous nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquid">
  <xs:annotation>
    <xs:documentation>Liquid of an unspecified nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="livestock">
  <xs:annotation>
    <xs:documentation>Livestock.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materials">
  <xs:annotation>
    <xs:documentation>General materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForPeople">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a danger to people or animals.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForTheEnvironment">
  <xs:annotation>
    <xs:documentation>Materials classed as being potentially dangerous to the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForWater">
  <xs:annotation>
    <xs:documentation>Materials classed as being dangerous when exposed to water (e.g. materials which may react
    exothermically with water).</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

<xs:enumeration value="oil">
  <xs:annotation>
    <xs:documentation>Oil.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ordinary">
  <xs:annotation>
    <xs:documentation>Materials that present limited environmental or health risk. Non-combustible, non-toxic, non-
corrosive.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="perishableProducts">
  <xs:annotation>
    <xs:documentation>Products or produce that will significantly degrade in quality or freshness over a short period of
time.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol or petroleum.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmaceuticalMaterials">
  <xs:annotation>
    <xs:documentation>Pharmaceutical materials.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="radioactiveMaterials">
  <xs:annotation>
    <xs:documentation>Materials that emit significant quantities of electro-magnetic radiation that may present a risk to people,
animals or the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuse">
  <xs:annotation>
    <xs:documentation>Refuse.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="toxicMaterials">
  <xs:annotation>
    <xs:documentation>Materials of a toxic nature which may damage the environment or endanger public
health.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicles">
  <xs:annotation>
    <xs:documentation>Vehicles of any type which are being transported.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Location" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification of a location either on a network (as a point or a linear location) or as an area. This may be

```



```

provided in one or more referencing systems.</xs:documentation>
</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:GroupOfLocations">
    <xs:sequence>
      <xs:element name="externalReferencing" type="D2LogicalModel:ExternalReferencing" minOccurs="0"
maxOccurs="unbounded" />
      <xs:element name="locationForDisplay" type="D2LogicalModel:PointCoordinates" minOccurs="0">
        <xs:annotation>
          <xs:documentation>A location which may be used by clients for visual display on user interfaces.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="locationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="LocationByReference">
  <xs:annotation>
    <xs:documentation>A location defined by reference to a predefined location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="predefinedLocationReference" type="D2LogicalModel:_PredefinedLocationVersionedReference"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned predefined location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="locationByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="LocationDescriptorEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors to help to identify a specific location.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="aroundABendInRoad">
      <xs:annotation>
        <xs:documentation>Around a bend in the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atMotorwayInterchange">
      <xs:annotation>
        <xs:documentation>At a motorway interchange.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atRestArea">
      <xs:annotation>
        <xs:documentation>At rest area off the carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atServiceArea">
      <xs:annotation>
        <xs:documentation>At service area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="atTollPlaza">
  <xs:annotation>
    <xs:documentation>At toll plaza.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="atTunnelEntryOrExit">
  <xs:annotation>
    <xs:documentation>At entry or exit of tunnel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inbound">
  <xs:annotation>
    <xs:documentation>On the carriageway or lane which is inbound towards the centre of the town or city.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inGallery">
  <xs:annotation>
    <xs:documentation>In gallery.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTheCentre">
  <xs:annotation>
    <xs:documentation>In the centre of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTheOppositeDirection">
  <xs:annotation>
    <xs:documentation>In the opposite direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTunnel">
  <xs:annotation>
    <xs:documentation>In tunnel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onBorder">
  <xs:annotation>
    <xs:documentation>On border crossing.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onBridge">
  <xs:annotation>
    <xs:documentation>On bridge.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onConnector">
  <xs:annotation>
    <xs:documentation>On connecting carriageway between two different roads or road sections.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onElevatedSection">
  <xs:annotation>
    <xs:documentation>On elevated section of road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onFlyover">
  <xs:annotation>
    <xs:documentation>On flyover, i.e. on section of road over another road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="onIceRoad">
  <xs:annotation>
    <xs:documentation>On ice road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onLevelCrossing">
  <xs:annotation>
    <xs:documentation>On level-crossing.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onLinkRoad">
  <xs:annotation>
    <xs:documentation>On road section linking two different roads.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onPass">
  <xs:annotation>
    <xs:documentation>On mountain pass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onRoundabout">
  <xs:annotation>
    <xs:documentation>On roundabout.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheLeft">
  <xs:annotation>
    <xs:documentation>On the left of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheRight">
  <xs:annotation>
    <xs:documentation>On the right of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheRoadway">
  <xs:annotation>
    <xs:documentation>On the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onUndergroundSection">
  <xs:annotation>
    <xs:documentation>On underground section of road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onUnderpass">
  <xs:annotation>
    <xs:documentation>On underpass, i.e. section of road which passes under another road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="outbound">
  <xs:annotation>
    <xs:documentation>On the carriageway or lane which is outbound from the centre of the town or city.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overCrestOfHill">
  <xs:annotation>

```

```
<xs:documentation>Over the crest of a hill.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="withinJunction">
  <xs:annotation>
    <xs:documentation>On the main carriageway within a junction between exit slip road and entry slip road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MeansOfPaymentEnum">
  <xs:annotation>
    <xs:documentation>Means of payment</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="paymentCard">
      <xs:annotation>
        <xs:documentation>Payment by electronic card(s). Use 'AcceptedPaymentCards' resp. 'UsedPaymentCard' to specify them
more exactly.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cash">
      <xs:annotation>
        <xs:documentation>Cash payment.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cashCoinsOnly">
      <xs:annotation>
        <xs:documentation>Cash payment with coins only.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="directCashTransfer">
      <xs:annotation>
        <xs:documentation>Direct cash transfer.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="electronicSettlement">
      <xs:annotation>
        <xs:documentation>Electronic settlement; includes on board units.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="rfid">
      <xs:annotation>
        <xs:documentation>RFID.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mobileApp">
      <xs:annotation>
        <xs:documentation>Payment method using an app on a smartphone.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payBySMS">
      <xs:annotation>
        <xs:documentation>Payment by SMS. The telephone number can be specified by
'paymentAdditionalDescription'.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mobilePhone">
      <xs:annotation>
```

```

    <xs:documentation>A payment method using a mobile phone but without an app or SMS, for instance by calling a
number.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MetresAsFloat">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a floating point format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="MetresAsNonNegativeInteger">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a non negative integer format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:simpleType name="MonthOfYearEnum">
  <xs:annotation>
    <xs:documentation>A list of the months of the year.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="january">
      <xs:annotation>
        <xs:documentation>The month of January.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="february">
      <xs:annotation>
        <xs:documentation>The month of February.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="march">
      <xs:annotation>
        <xs:documentation>The month of March.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="april">
      <xs:annotation>
        <xs:documentation>The month of April.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="may">
      <xs:annotation>
        <xs:documentation>The month of May.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="june">

```

```

<xs:annotation>
  <xs:documentation>The month of June.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="july">
  <xs:annotation>
    <xs:documentation>The month of July.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="august">
  <xs:annotation>
    <xs:documentation>The month of August.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="september">
  <xs:annotation>
    <xs:documentation>The month of September.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="october">
  <xs:annotation>
    <xs:documentation>The month of October.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="november">
  <xs:annotation>
    <xs:documentation>The month of November.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="december">
  <xs:annotation>
    <xs:documentation>The month of December.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value" type="D2LogicalModel:MultilingualStringValue" maxOccurs="unbounded" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValueType">
      <xs:attribute name="lang" type="xs:language" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="MultilingualStringValueType">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>

```

```

<xs:complexType name="NamedArea">
  <xs:annotation>
    <xs:documentation>An area defined by a name and/or in terms of known boundaries, such as country or county boundaries or
    allocated control area of particular authority. The attributes do not form a union; instead, the smallest intersection forms the resulting
    area.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="nation" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of an ISO recognised country.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="county" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="areaName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of an area.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="policeForceControlArea" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of a police force area.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadOperatorControlArea" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of a road operator control area.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="namedAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="NetworkLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification of a location on a network (as a point or a linear location).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="supplementaryPositionalDescription" type="D2LogicalModel:SupplementaryPositionalDescription"
        minOccurs="0" />
        <xs:element name="destination" type="D2LogicalModel:Destination" minOccurs="0" />
        <xs:element name="networkLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="NonNegativeInteger">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646,
    2147483647}.</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:restriction base="xs:nonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="NonOrderedLocationGroupByList">
  <xs:annotation>
    <xs:documentation>A group of (i.e. more than one) physically separate locations which have no specific order and where each location is explicitly listed.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NonOrderedLocations">
      <xs:sequence>
        <xs:element name="locationContainedInGroup" type="D2LogicalModel:Location" minOccurs="2" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A location contained in a non ordered group of locations.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="nonOrderedLocationGroupByListExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NonOrderedLocationGroupByReference">
  <xs:annotation>
    <xs:documentation>A group of (i.e. more than one) physically separate locations which have no specific order that are defined by reference to a predefined non ordered location group.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NonOrderedLocations">
      <xs:sequence>
        <xs:element name="predefinedNonOrderedLocationGroupReference"
type="D2LogicalModel:_PredefinedNonOrderedLocationGroupVersionedReference" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned instance of a predefined non ordered location group as specified in a PredefinedLocationsPublication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="nonOrderedLocationGroupByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NonOrderedLocations" abstract="true">
  <xs:annotation>
    <xs:documentation>Multiple (i.e. more than one) physically separate locations which have no specific order.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:GroupOfLocations">
      <xs:sequence>
        <xs:element name="nonOrderedLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NumberOfAxlesCharacteristic">
  <xs:annotation>
    <xs:documentation>Number of axles characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>

```



```

<xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="numberOfAxles" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The total number of axles of an individual vehicle.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="numberOfAxlesCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="OccupancyDetectionTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>No occupancy detection available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="balancing">
      <xs:annotation>
        <xs:documentation>Counting and balancing incoming and outgoing traffic amount ('indirect' method).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="singleSpaceDetection">
      <xs:annotation>
        <xs:documentation>There is a detector for every individual parking space ('direct' method).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="modelBased">
      <xs:annotation>
        <xs:documentation>Occupancy detection is based on some model, i.e. hydrograph, forecasting or
estimation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="manual">
      <xs:annotation>
        <xs:documentation>Manual collection of occupancy information, i.e. operators count the vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unspecified">
      <xs:annotation>
        <xs:documentation>Unspecified.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:restriction>
</xs:simpleType>
<xs:complexType name="OffsetDistance">
  <xs:annotation>
    <xs:documentation>The non negative offset distance from the ALERT-C referenced point to the actual point.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="offsetDistance" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The non negative offset distance from the ALERT-C referenced point to the actual point. The ALERT-C
        locations in the Primary and Secondary locations must always encompass the linear section being specified, thus Offset Distance is
        towards the other point.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="offsetDistanceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OpeningTimes">
  <xs:annotation>
    <xs:documentation>A specification of opening times (e.g. for a parking site, a service facility, an access or the availability for
    equipment).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="lastUpdated" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The date/time at which this information was last updated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openAllYear" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>indicates whether the parking facility is available 365 days a year</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="available24hours" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies if the availability is 24 hours a day. If omitted, this information is unknown or
        heterogeneous.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
        further relevant information may be obtained.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openingTimesUnknown" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the opening times are unknown.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openingTimesNotSpecified" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the opening times are not specified.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validity" type="D2LogicalModel:Validity" minOccurs="0" />
    <xs:element name="openingTimesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

```

```

<xs:complexType name="OverallPeriod">
  <xs:annotation>
    <xs:documentation>A continuous or discontinuous period of validity defined by overall bounding start and end times and the
    possible intersection of valid periods (potentially recurring) with the complement of exception periods (also potentially
    recurring).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="overallStartTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overallEndTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
        is true.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="exceptionPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
        is false.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overallPeriodExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="OwnershipTypeEnum">
  <xs:annotation>
    <xs:documentation>Ownership type enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="public">
      <xs:annotation>
        <xs:documentation>Public ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="private">
      <xs:annotation>
        <xs:documentation>Private ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="publicPrivate">
      <xs:annotation>
        <xs:documentation>A public private partnership model.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="resident">
      <xs:annotation>
        <xs:documentation>A private individual ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>

```

```

    <xs:documentation>An unknown kind of ownership.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other kind of ownership.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingAccess">
  <xs:annotation>
    <xs:documentation>Describes one entrance or exit (or both) to a parking site.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="accessCategory" type="D2LogicalModel:AccessCategoryEnum" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies the category(s) of this access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A name of the entrance or exit. This might be an indication to the corresponding road, for
example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessEquipment" type="D2LogicalModel:AccessEquipmentEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies additional equipment for this access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="photoUrl" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessOnlyAssignedFor" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Only the assignment given in this class is allowed for this access, i.e. other assignments are not allowed.
By using this role, do not use the same set of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessAssignedAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The assignment given in this class is convenient for this access, but not exclusionary. By using this role, do
not use the same set of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessProhibitedFor" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The assignment given in this class is prohibited for this access. By using this role, do not use the same set
of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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</xs:element>
<xs:element name="primaryRoad" type="D2LogicalModel:Road" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Identification for up to two primary roads located nearby the access or which make the parking
accessible.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="location" type="D2LogicalModel:Location" minOccurs="0" />
<xs:element name="openingTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0" />
<xs:element name="parkingAccessExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingAssignment">
  <xs:annotation>
    <xs:documentation>One set of prohibited/only allowed/convenient assignment for parking space(s), parking site(s) or an access.
Same kind of data forms a union (e.g. lorries OR buses), different kind of data forms an intersection (e.g. residents AND long-
term).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Limitation to a set of special users.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingDuration" type="D2LogicalModel:ParkingDurationEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Temporal parking classification for this assignment (long term, short term, ...). Depending on the used role,
these classifications are either assigned or prohibited.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleCharacteristics" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="hazardousMaterials" type="D2LogicalModel:HazardousMaterials" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Hazardous Material which is prohibited to park there.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="timePeriodByHour" type="D2LogicalModel:TimePeriodByHour" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Used for example for mixed parking areas. If at least one restrictedValidity is given, spaces are not
available outside the union of all given time ranges. EndTime might be a lower value than start time, when validity contains
midnight.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermit" type="D2LogicalModel:ParkingPermit" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="parkingAssignmentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingDurationEnum">
  <xs:annotation>
    <xs:documentation>Parking durations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="pickUpDropOff">
      <xs:annotation>
        <xs:documentation>Very short duration parking normally of up to 20 minutes assigned for pick-ups and drop-
offs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:enumeration>
<xs:enumeration value="shortTerm">
  <xs:annotation>
    <xs:documentation>Short term parking without indication of max-duration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm24hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 24 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm48hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 48 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm72hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 72 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm96hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 96 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="longTerm">
  <xs:annotation>
    <xs:documentation>Long term parking in excess of any specified short term parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingEquipmentOrServiceFacility" abstract="true">
  <xs:annotation>
    <xs:documentation>One type of equipment or additional service facility that is available at the parking site, parking space or group
of parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="equipmentOrServiceFacilityIdentifier" type="D2LogicalModel:String" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>An internal identifier for the equipment or service facility, e.g. an inventory number. This attribute has an
unbounded multiplicity to support identifiers for multiple occurrences of this element.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="availability" type="D2LogicalModel:AvailabilityEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies, if the element in question is available or not. Note that this is no dynamic

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information!</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="numberOfEquipmentOrServiceFacility" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of the specified element (e.g. number of toilets, restaurants, park & ride places, etc.) with
respect to user restriction for the parking record, a complete group of spaces or a single space. Dynamic
overridable.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="additionalDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Provides an additional description.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="otherEquipmentOrServiceFacility" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the additional equipment or service facility, if the enumerations provided do not fit. Use literal
'other' in this case.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="nameOrBrand" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Name or brand of the equipment or service facility, e.g. brand of petrol station, name of the WC-Service
etc.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="comment" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A free text comment that can be used by the operator to convey un-coded
observations/information.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="photoUrl" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Limitation to a set of special users.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="availabilityAndOpeningTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Specify the general availability of some equipment or service facility (by using just the 'OverallPeriod'
component) or specify its opening times more detailed.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tariffsAndPayment" type="D2LogicalModel:TariffsAndPayment" minOccurs="0" />
<xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
<xs:element name="applicableForVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
maxOccurs="unbounded" />

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    <xs:element name="parkingEquipmentOrServiceFacilityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingLayoutEnum">
  <xs:annotation>
    <xs:documentation>Types of layout of the parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="multiStorey">
      <xs:annotation>
        <xs:documentation>Parking is on multiple levels within a parking building.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="singleLevel">
      <xs:annotation>
        <xs:documentation>Parking is inside a building on a single ground floor level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="underground">
      <xs:annotation>
        <xs:documentation>Parking is on one or more floors below ground level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="undergroundAndMultistorey">
      <xs:annotation>
        <xs:documentation>Parking is on multiple floors levels including both below and above ground level. </xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="automatedParkingGarage">
      <xs:annotation>
        <xs:documentation>Parking is completely automated from the point of leaving the vehicle in an arrival bay to its delivery back to
the driver in a pickup bay.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="openSpace">
      <xs:annotation>
        <xs:documentation>A normal ground level parking place.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="covered">
      <xs:annotation>
        <xs:documentation>Some covered parking space.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nested">
      <xs:annotation>
        <xs:documentation>A parking space within a complex structure of buildings or surrounded by buildings.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="field">
      <xs:annotation>
        <xs:documentation>A non-bituminized parking space (e.g. for events or as extension).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingModeEnum">
  <xs:annotation>
    <xs:documentation>The arrangement of the parking space or the group of parking spaces in relation to the
road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="perpendicularParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located in an angle of nearly 90 degree to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="parallelParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located parallel to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="echelonParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located in a diagonal relation to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="parkingOnOppositeSideOfRoad">
      <xs:annotation>
        <xs:documentation>Parking is possible on the other side of the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingPaymentModeEnum">
  <xs:annotation>
    <xs:documentation>Mode of payment for parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="payAndDisplay">
      <xs:annotation>
        <xs:documentation>Pay at machine and display ticket inside vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payManualAtExitBooth">
      <xs:annotation>
        <xs:documentation>Pay at the manned exit booth of the parking site. </xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payPriorToExit">
      <xs:annotation>
        <xs:documentation>Pay at machine on foot prior to returning to vehicle and use payment ticket to exit.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:enumeration>
<xs:enumeration value="payByPrepaidToken">
  <xs:annotation>
    <xs:documentation>Pay by prepaid token that is used at exit.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payAndExit">
  <xs:annotation>
    <xs:documentation>Pay directly at the exit with a payment card (usually, this payment card must have been used when entering as well). In 'AccessEquipmentEnum', there are three more literals to indicate, whether an entrance or exit has got this feature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingPermit">
  <xs:annotation>
    <xs:documentation>A permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingPermitType" type="D2LogicalModel:PermitTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Type of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitScheme" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Scheme of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitIdentifier" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRecord" abstract="true">
  <xs:annotation>
    <xs:documentation>A container for static parking information. Must be specialised as a parking site or as a group of parking sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the parking, i.e. name of the parking site or the group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingAlias" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Alternative name for the parking site or the group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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<xs:element name="parkingDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Additional description of the parking site or the group of parking sites.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRecordVersionTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Date/time that this version of the parking record was defined.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of parking spaces (attribute is used for a parking record as well as for a group of parking
spaces).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingPrincipalNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of parking spaces that are not assigned for a particular purpose.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="maximumParkingDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to
avoid overnight parking).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="photoUrl" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
further relevant information may be obtained.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancyDetectionType" type="D2LogicalModel:OccupancyDetectionTypeEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if
any (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="emergencyContact" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact to be used in times of emergencies.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="owner" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the owner of the parking facility.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="responsibleAuthority" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the responsible authority of the parking facility or parking area.</xs:documentation>
  </xs:annotation>

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</xs:annotation>
</xs:element>
<xs:element name="securityService" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of one or more security services of the parking facility.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="operator" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the operator of the parking facility.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="servicePartner" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of a service partner of the parking record, i.e. the person or organisation that should be
    contacted to provide servicing or support services for equipment at the parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingVMS" type="D2LogicalModel:ParkingVMS" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingLocation" type="D2LogicalModel:GroupOfLocations">
  <xs:annotation>
    <xs:documentation>The location(s) or the extent of the parking. Examples could be an Area for parking area, a Point location
    for an urban parking facility or a Linear for on street parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRoute" type="D2LogicalModel:ParkingRoute" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingColour" type="D2LogicalModel:RGBColour" minOccurs="0">
  <xs:annotation>
    <xs:documentation>A colour, which can be assigned to the parking. Often used with parking areas for a quick visual
    distinction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="onlyAssignedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By
    using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of
    attributes.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="assignedParkingAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for
    this kind of assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="prohibitedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Parking is not allowed for the given assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tariffsAndPayment" type="D2LogicalModel:TariffsAndPayment" minOccurs="0" />
<xs:element name="parkingEquipmentOrServiceFacility"
type="D2LogicalModel:_ParkingRecordEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="parkingSpace" type="D2LogicalModel:_ParkingSpace" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Properties of a single parking space. This aggregation may only be used with the "ParkingSpace"
    specialisation.</xs:documentation>
  </xs:annotation>

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</xs:element>
<xs:element name="groupOfParkingSpaces" type="D2LogicalModel:_GroupOfParkingSpaces" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Properties for a group of parking spaces. Usually, all properties specified have to be the same for all spaces
included. This aggregation may only be used with the "GroupOfParkingSpaces" specialisation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingThresholds" type="D2LogicalModel:ParkingThresholds" minOccurs="0" />
<xs:element name="permitsAndProhibitions" type="D2LogicalModel:PermitsAndProhibitions" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="emergencyAssemblyPoint" type="D2LogicalModel:GroupOfLocations" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Some geographic location(s) within or nearby the parking, where people have to meet in case of a fire, for
example.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="entireArea" type="D2LogicalModel:Area" minOccurs="0">
  <xs:annotation>
    <xs:documentation>An underlying area this parking record is located in or belongs to. Examples are a state, province, truck
parking area etc. A name can be specified in the area structure.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRecordDimension" type="D2LogicalModel:Dimension" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Dimension either of the building or a virtual rectangle encapsulating the parking site(s). Use
'dimensionUsableArea' to define the total space available for parking. Use 'dimensionHeight' only for a building, not for the restriction
of vehicles.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRecordExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingRoute" abstract="true">
  <xs:annotation>
    <xs:documentation>A parking route, defined by ParkingRouteDetails or by a reference.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRouteColour" type="D2LogicalModel:RGBColour" minOccurs="0">
      <xs:annotation>
        <xs:documentation>A colour assigned to a parking route for visualisation purpose.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingRouteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRouteByReference">
  <xs:annotation>
    <xs:documentation>A route defined by a reference to an earlier specified route.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRoute">
      <xs:sequence>
        <xs:element name="parkingRouteReference" type="D2LogicalModel:_ParkingRouteDetailsVersionedReference" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a parking route.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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        </xs:annotation>
    </xs:element>
    <xs:element name="parkingRouteByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="ParkingRouteDetails">
    <xs:annotation>
        <xs:documentation>Urban context: Defining parking routes leading to the parking site. Truck parking context: Can be used to
define a dynamic route management.</xs:documentation>
    </xs:annotation>
    <xs:complexContent>
        <xs:extension base="D2LogicalModel:ParkingRoute">
            <xs:sequence>
                <xs:element name="parkingRouteName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>Name of the parking route.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="parkingRouteType" type="D2LogicalModel:ParkingRouteTypeEnum" minOccurs="0" maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>The type of parking route. If not specified, the route is designed for any type of
vehicles.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="dynamicRouteManagement" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>Indicates that there is dynamic route management for truck parking, i.e. a management system
concerning several truck parkings (including this one) along a route.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="parkingRouteIconIndex" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>An index, which can identify some icon for visualisation of the route. Note that form and usage of this
index as well as the icons itself are not further determined here.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="parkingRouteDirection" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>The direction of traffic, for which the parking route can be used. If not specified, the route can be used in
the order of the given locations.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="parkingRouteDirection2" type="D2LogicalModel:ParkingRouteDirectionEnum" minOccurs="0"
maxOccurs="1">
                    <xs:annotation>
                        <xs:documentation>Additional directions of traffic, for which the parking route can be used. If not specified, the route can be
used in the order of the given locations.</xs:documentation>
                    </xs:annotation>
                </xs:element>
                <xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
                <xs:element name="parkingRouteDetailsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
            </xs:sequence>
            <xs:attribute name="id" type="xs:string" use="required" />
            <xs:attribute name="version" type="xs:string" use="required" />
        </xs:extension>
    </xs:complexContent>
</xs:complexType>

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<xs:simpleType name="ParkingRouteDirectionEnum">
  <xs:annotation>
    <xs:documentation>The direction of the parking route.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="towardsParkingSite">
      <xs:annotation>
        <xs:documentation>Towards parking site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="awayFromParkingSite">
      <xs:annotation>
        <xs:documentation>Away from parking site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingRouteTypeEnum">
  <xs:annotation>
    <xs:documentation>The type of the parking route.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="pedestrian">
      <xs:annotation>
        <xs:documentation>A parking route for pedestrian.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>A parking route for bicycles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lorry">
      <xs:annotation>
        <xs:documentation>A parking route for lorries.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Another type of parking route.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingSecurityEnum">
  <xs:annotation>
    <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="socialControl">
      <xs:annotation>
        <xs:documentation>Social control e.g. parking situated in a neighbourhood.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityStaff">
      <xs:annotation>
        <xs:documentation>Security staff.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>

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```
<xs:enumeration value="externalSecurity">
  <xs:annotation>
    <xs:documentation>External security, e.g. police or staff not directly belonging to the parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cctv">
  <xs:annotation>
    <xs:documentation>CCTV (camera observation).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dog">
  <xs:annotation>
    <xs:documentation>Dog.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="guard24hours">
  <xs:annotation>
    <xs:documentation>24/24 guard.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lighting">
  <xs:annotation>
    <xs:documentation>Site is illuminated in a normal way (but not as strong as 'floodLight').</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="floodLight">
  <xs:annotation>
    <xs:documentation>Flood light (stronger than lighting).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fences">
  <xs:annotation>
    <xs:documentation>Fences.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="areaSeperatedFromSurroundings">
  <xs:annotation>
    <xs:documentation>Site is separated from its surroundings. Can also be used to express a space for noise-producing vehicles,
e.g. lorries with cooling generators.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>There are no security measures.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the values in this enumeration applies. Use 'parkingAdditionalSecurity'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
```



```

<xs:complexType name="ParkingSite" abstract="true">
  <xs:annotation>
    <xs:documentation>A record containing static details of a parking site. Must be specialised as an 'Urban-' or
'InterUrbanParkingSite' or a 'SpecialLocationParkingSite'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecord">
      <xs:sequence>
        <xs:element name="parkingReservation" type="D2LogicalModel:ReservationTypeEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Indication of whether a parking reservation service is available and/or mandatory.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingLayout" type="D2LogicalModel:ParkingLayoutEnum" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Layout of the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="highestFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Highest floor of the parking site. It is possible to have negative values here in case it is underground only.
Must be higher or equal than 'lowestFloor'.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="lowestFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Lowest floor of the parking site. Positive values may apply in case it is over ground only. Must be lower or
equal than 'highestFloor'.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="temporaryParking" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Indicates that the parking site is on a temporary basis. It might close permanently within short notice or
might only be partial equipped. The physical parking possibilities might be provisional, too.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteAddress" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Information about the parking site itself (address etc.). The 'GroupOfLocations' association must not be
used for this role.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="reservationService" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Reservation service (for end users). It is recommended to give URL and telephone.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingUsageScenario" type="D2LogicalModel:_ParkingSiteScenarioIndexParkingUsageScenario"
minOccurs="0" maxOccurs="unbounded" />
        <xs:element name="openingTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0" />
        <xs:element name="parkingAccess" type="D2LogicalModel:ParkingAccess" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>An exit from the parking facility onto the road network from any parking space unless separate exits are
specified for assigned parking spaces, in which case this is an exit from only the principal parking spaces.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingStandardsAndSecurity" type="D2LogicalModel:ParkingStandardsAndSecurity" minOccurs="0" />
        <xs:element name="parkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingSiteStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="spacesAvailable">
      <xs:annotation>
        <xs:documentation>Parking spaces are currently available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="almostFull">
      <xs:annotation>
        <xs:documentation>The parking site is almost full (as defined by its configuration parameters).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fullAtEntrance">
      <xs:annotation>
        <xs:documentation>The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing
VMS).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="full">
      <xs:annotation>
        <xs:documentation>The parking site is full (as defined by its configuration parameters).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The status of the parking site is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpace">
  <xs:annotation>
    <xs:documentation>A single parking space. It is possible to define the same parking space more than once with different
properties, e.g. when there is a different parking assignment for different times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSpaceBasics">
      <xs:sequence>
        <xs:element name="identicalToParkingSpace" type="D2LogicalModel:IndexReference" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'ParkingSpace', which is identical from a local point of view (i.e. which is the
same parking space). To be used when defining mixed parking areas (with using different time slots).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="location" type="D2LogicalModel:Location" minOccurs="0" />
        <xs:element name="parkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
          <xs:annotation>

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    <xs:documentation>Dimension of the parking space (not all dimension attributes need to be provided). If the parking space is
not rectangular, its dimension is specified as the smallest rectangle fitting inside its shape.</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="parkingSpaceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingSpaceAccessibilityEnum">
  <xs:annotation>
    <xs:documentation>Easements for handicapped people especially related to a parking space or a group of parking
spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="extraSpaceLeftSide">
      <xs:annotation>
        <xs:documentation>There is some extra space on the left side of the parking space (in parking direction point of view), for
example to improve the situation for wheelchair users.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="extraSpaceRightSide">
      <xs:annotation>
        <xs:documentation>There is some extra space on the right side of the parking space (in parking direction point of view), for
example to improve the situation for wheelchair users.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nearbyPedestrianExit">
      <xs:annotation>
        <xs:documentation>The parking space is quite near to a pedestrian exit. Note: Can be more exactly defined by using
'dedicatedAccess'.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bordersMarked">
      <xs:annotation>
        <xs:documentation>The border of the parking space is marked (painted on the ground).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpaceBasics" abstract="true">
  <xs:annotation>
    <xs:documentation>Common properties of parking spaces and groups of parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSpaceOrGroupIdentifier" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A public identifier or short description for the parking space or group of parking spaces, for example "6D" or
"Truck parking west".</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingFloorOrLevel" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The floor or level of the parking site on which the assigned parking spaces are located.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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</xs:annotation>
</xs:element>
<xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSpaceAccessibility" type="D2LogicalModel:ParkingSpaceAccessibilityEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Further easements for handicapped people related to this parking space or this group of parking
spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSpacePhysics" type="D2LogicalModel:ParkingSpacePhysicsEnum" minOccurs="0" maxOccurs="2">
  <xs:annotation>
    <xs:documentation>Specifies 'driveThrough' or 'openAir' for the parking space or the group of parking
spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingMode" type="D2LogicalModel:ParkingModeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The arrangement of the parking space or the group of parking spaces in relation to the
road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingReservation" type="D2LogicalModel:ReservationTypeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Indication of whether a parking reservation service is available and/or mandatory.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="maximumParkingDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to
avoid overnight parking).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="distanceFromPrimaryRoad" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the distance from the primary road in metres. Especially useful, if parking is located on a smaller
type of road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancyDetectionType" type="D2LogicalModel:OccupancyDetectionTypeEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if
any (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSecurity" type="D2LogicalModel:ParkingSecurityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dedicatedAccess" type="D2LogicalModel:DedicatedAccess" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="onlyAssignedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>

```

```

    <xs:documentation>Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By
    using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of
    attributes.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="assignedParkingAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for
      this kind of assignment.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="prohibitedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Parking is not allowed for the given assignment.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingEquipmentOrServiceFacility"
  type="D2LogicalModel:_ParkingSpaceBasicsEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility" minOccurs="0"
  maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Equipment, services and szenarios, which are directly related to the assigned parking space or parking
      space group. Note that the infrastructure index must be unique with respect to the Parking class' infrastrucure
      indeces</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingUsageScenario" type="D2LogicalModel:_ParkingSpaceBasicsScenarioIndexParkingUsageScenario"
  minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingSpaceBasicsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingSpacePhysicsEnum">
  <xs:annotation>
    <xs:documentation>Specifies drive through and open air properties for the parking space or the group of parking
    spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="driveThrough">
      <xs:annotation>
        <xs:documentation>Entering as well as leaving the parking space can be done straight in the direction of
        parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="openAir">
      <xs:annotation>
        <xs:documentation>There is no roof and not another storey on top of the parking space, which could prevent from rain, for
        example.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingSpecialLocationEnum">
  <xs:annotation>
    <xs:documentation>Locations, often associated with a building, for a SpecialLocationParkingSite.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="airportTerminal">
      <xs:annotation>
        <xs:documentation>The parking site is associated with an airport terminal.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="exhibitorCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with an exhibition centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shoppingCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a shopping centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="specificFacility">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a specific facility (e.g. a hospital, a tourist site, a garden centre, a park
etc.).. Attribute "parkingOtherSpecialLocation" may be used to specify details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="trainStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a train station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="campground">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a campground.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="themePark">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a theme park.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ferryTerminal">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a ferry terminal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleOnRailTerminal">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a vehicle-to-rail terminal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="coachStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a coach station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cableCarStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a cable car station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicTransportStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a public transport station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="market">
  <xs:annotation>
```

```

    <xs:documentation>The parking site is associated with a market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="religiousCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a religious centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="conventionCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a convention centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cinema">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a cinema.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="skilift">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a ski lift.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>The parking site is associated with some other location. Use "parkingOtherSpecialLocation" to specify
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingStandardsAndSecurity">
  <xs:annotation>
    <xs:documentation>Security measures and standards or standard-like categorization for a parking site.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="labelSecurityLevel" type="D2LogicalModel:LABELSecurityLevelEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Formal assessment for the security level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="labelServiceLevel" type="D2LogicalModel:LABELServiceLevelEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Formal assessment for the service level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="labelSecurityLevelSelfAssessment" type="D2LogicalModel:LABELSecurityLevelEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Self-assessment for the security level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

</xs:element>
<xs:element name="labelServiceLevelSelfAssessment" type="D2LogicalModel:LABELServiceLevelEnum" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Self-assessment for the service level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSecurity" type="D2LogicalModel:ParkingSecurityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingAdditionalSecurity" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Security equipment of the parking site that is not covered by the enumeration
'ParkingSecurityEnum'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSupervision" type="D2LogicalModel:ParkingSupervisionEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Defines the kind of supervision of the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSecurityNationalClassification" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A national classification of the parking security.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="certifiedSecureParking" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Presence of a certification for secure parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dateOfCertification" type="D2LogicalModel:Date" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Date of certification.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStandardsAndSecurityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusColourMapping">
  <xs:annotation>
    <xs:documentation>Defines a pair of 'parkingSiteStatus' and a corresponding colour.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbColour" type="D2LogicalModel:RGBColour" />
    <xs:element name="parkingStatusColourMappingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

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<xs:simpleType name="ParkingSupervisionEnum">
  <xs:annotation>
    <xs:documentation>Defines the kind of supervision of the parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="remote">
      <xs:annotation>
        <xs:documentation>Remote.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="onSite">
      <xs:annotation>
        <xs:documentation>On site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="controlCentreOnSite">
      <xs:annotation>
        <xs:documentation>Control centre on site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="controlCentreOffSite">
      <xs:annotation>
        <xs:documentation>Control centre off site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="patrol">
      <xs:annotation>
        <xs:documentation>Patrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>None.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingTable">
  <xs:annotation>
    <xs:documentation>A collection of parking records, which can be parking sites or groups of parking sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingTableName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the parking table.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingTableVersionTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>

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    <xs:documentation>The date/time that this version of the parking table was defined by the supplier. The identity and version of
the table are defined by the class stereotype implementation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRecord" type="D2LogicalModel:ParkingRecord" maxOccurs="unbounded" />
<xs:element name="parkingTableExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingTablePublication">
  <xs:annotation>
    <xs:documentation>A publication defining one or more tables that have entries of parking sites or groups of them, located in an
urban or interurban context.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="headerInformation" type="D2LogicalModel:HeaderInformation" minOccurs="0" />
    <xs:element name="parkingTable" type="D2LogicalModel:ParkingTable" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingThresholds">
  <xs:annotation>
    <xs:documentation>Configuration parameters of the parking site, used among others for the dynamic attribute 'parkingStatus'.
This component or all elements of it can be overridden in the dynamic model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="almostFullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from
'almost full' to 'spaces available' as the parking site's occupancy decreases. Must be greater than 'almostFullIncreasing'
value.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="almostFullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the state of the site is considered to change from 'spaces
available' to 'almost full' as the site's occupancy increases. Must be lower or equal to 'almostFullDecreasing' and greater
'fullDecreasing'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="entranceFull" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g.
full sign is displayed at entrance or on managing VMS).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from 'full'
to 'almost full' as the site's occupancy decreases. Must be greater or equal to 'fullIncreasing' value and lower than
'almostFullIncreasing'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the state of the parking site is considered to change from
'almost full' to 'full' as the site's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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```

<xs:element name="overcrowding" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The number of vehicles on the parking above which the overcrowding state of the parking site is considered
to change to 'overcrowding'. Can be used as an alternative to the overcrowding level attributes.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="overcrowdingLevel1" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'noOvercrowding' to 'overcrowdingLevel1'. Must be lower than the 'overcrowdingLevel2'
value.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="overcrowdingLevel2" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'overcrowdingLevel1' to 'overcrowdingLevel2'. Must be greater than the 'overcrowdingLevel1'
value.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingLastMaximumOccupancy" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The last known occupancy (number of parking vehicles on the site) under safe
conditions.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStatusColourMapping" type="D2LogicalModel:ParkingStatusColourMapping" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="parkingThresholdsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingTypeOfGroup">
  <xs:annotation>
    <xs:documentation>The type of group specification (group of parking spaces).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="adjacentSpaces">
      <xs:annotation>
        <xs:documentation>A description of adjacent spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nonAdjacentSpaces">
      <xs:annotation>
        <xs:documentation>A description of non-adjacent spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="completeFloor">
      <xs:annotation>
        <xs:documentation>A description for a complete floor in a car park.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mixedUsage">
      <xs:annotation>
        <xs:documentation>A definition for mixed usage for this group (e.g. by time). This means there are more definitions for this
group or for sub- or supersets of it.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="statisticsOnly">

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```

    <xs:annotation>
      <xs:documentation>This group provides statistical figures only, for example 60 spaces for lorries in total. Usually, this kind of
group does not use georeference information. It is not a complete description of parking spaces.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="singleParameters">
    <xs:annotation>
      <xs:documentation>This group provides some single features for a selected number of spaces. For example, you can define all
spaces, where electric charging stations are provided. It is not a complete description of the parking spaces.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Some other kind of group.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingUsageScenario">
  <xs:annotation>
    <xs:documentation>A special type of usage available for the parking site or the group of parking spaces. In the
'ParkingStatusPublication', the operation type (in operation or not) can be defined.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenarioEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A special type of usage available for the parking site or a group of parking spaces. In the
'ParkingStatusPublication', the operation type (in operation or not) can be defined.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="truckParkingDynamicManagement" type="D2LogicalModel:TruckParkingDynamicManagementEnum"
minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Two modes for parking lorries in a efficient way according to their departure times. May only be used for
parking scenario 'truckParking'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="eventParkingType" type="D2LogicalModel:PublicEventTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Parking associated with an event. May only be used for parking scenario
'eventParking'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="eventParkingType2" type="D2LogicalModel:PublicEventType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Parking associated with an event. May only be used for parking scenario
'eventParking'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="scenarioAvailability" type="D2LogicalModel:OverallPeriod" minOccurs="0" />
    <xs:element name="parkingUsageScenarioExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingUsageScenarioEnum">
  <xs:annotation>
    <xs:documentation>Types of parking usage (park & ride, kiss & ride, ...)</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">

```

```

<xs:enumeration value="truckParking">
  <xs:annotation>
    <xs:documentation>The parking site is designed for lorries (other vehicles are allowed as well).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkAndRide">
  <xs:annotation>
    <xs:documentation>Parking for public transport users.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkAndCycle">
  <xs:annotation>
    <xs:documentation>A parking site for people who continue their journey by bike.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkAndWalk">
  <xs:annotation>
    <xs:documentation>A parking site for people who continue to walk.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="kissAndRide">
  <xs:annotation>
    <xs:documentation>Parking site with possibility for very short parking to drop off (or drop on) passengers for public
transport.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liftshare">
  <xs:annotation>
    <xs:documentation>A parking site for people who are sharing their cars.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carSharing">
  <xs:annotation>
    <xs:documentation>A parking site for people who are sharing cars organised by a car sharing company..</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="restArea">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a rest area, i.e. people can relax some time outside their car there. Note
that the presence of some bench, picnic place or toilet is already sufficient; there is no need for a restaurant or a
building.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="serviceArea">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a service area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dropOffWithValet">
  <xs:annotation>
    <xs:documentation>A valet drop off service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dropOffMechanical">
  <xs:annotation>
    <xs:documentation>A mechanical drop off service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eventParking">

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    <xs:annotation>
      <xs:documentation>Parking is associated with an event. Use 'eventParkingType' or 'eventParkingType2' to specify the
event.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="automaticParkingGuidance">
    <xs:annotation>
      <xs:documentation>Specifies, if there is a (visual) guidance system within the parking site, which helps the drivers to find free
spaces. Note: This is not a parking VMS or a parking route, which are usually located outside the parking site.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="staffGuidesToSpace">
    <xs:annotation>
      <xs:documentation>Staff guides to space.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="vehicleLift">
    <xs:annotation>
      <xs:documentation>Vehicle lift</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="loadingBay">
    <xs:annotation>
      <xs:documentation>The parking site or space(s) are designed as a loading bay.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="dropOff">
    <xs:annotation>
      <xs:documentation>The parking site or space(s) are designed for drop off only.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="overnightParking">
    <xs:annotation>
      <xs:documentation>The parking site or space(s) are designed for overnight parking. Note that the absence of this scenario does
not automatically mean a prohibition of overnight parking. See also PermitsAndProhibitions.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Some other usage scenario.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingVMS">
  <xs:annotation>
    <xs:documentation>A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the
parking site (e.g. to indicate to drivers the current availability of spaces).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="vmsUnitUsedToManageParking" type="D2LogicalModel:_VmsUnitRecordVersionedReference"
minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the

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parking site (e.g. to indicate to drivers the current availability of spaces).</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="vmsOperator" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingVMSExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:annotation>
    <xs:documentation>A payload publication of traffic related information or associated management information created at a specific
point in time that can be exchanged via a DATEX II interface.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="publicationTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date/time at which the payload publication was created.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicationCreator" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="payloadPublicationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language" use="required">
    <xs:annotation>
      <xs:documentation>The default language used throughout the payload publication.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:simpleType name="PaymentCardBrandsEnum">
  <xs:annotation>
    <xs:documentation>Brands of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="americanExpress">
      <xs:annotation>
        <xs:documentation>American Express</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cirrus">
      <xs:annotation>
        <xs:documentation>Cirrus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dinersClub">
      <xs:annotation>
        <xs:documentation>Diners Club</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="discoverCard">
      <xs:annotation>
        <xs:documentation>Discover Card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="giroCard">
      <xs:annotation>
        <xs:documentation>Girocard</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="maestro">
      <xs:annotation>

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<xs:documentation>Maestro</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="masterCard">
  <xs:annotation>
    <xs:documentation>MasterCard</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visa">
  <xs:annotation>
    <xs:documentation>Visa</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vPay">
  <xs:annotation>
    <xs:documentation>V PAY</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="PaymentCardTypesEnum">
  <xs:annotation>
    <xs:documentation>Types of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="creditCard">
      <xs:annotation>
        <xs:documentation>Credit card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="debitCard">
      <xs:annotation>
        <xs:documentation>Debit card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chargeCard">
      <xs:annotation>
        <xs:documentation>Charge card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fleetCard">
      <xs:annotation>
        <xs:documentation>Fleet or petrol station card.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="storedValueCard">
      <xs:annotation>
        <xs:documentation>Stored value card / prepaid card.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Some other type of card.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
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    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Percentage">
  <xs:annotation>
    <xs:documentation>A measure of percentage.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="PercentageDistanceAlongLinearElement">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from the start node expressed as a percentage of the
    whole length of the linear element, where start node is relative to the element definition rather than the direction of traffic
    flow.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="percentageDistanceAlong" type="D2LogicalModel:Percentage" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measure of distance along a linear element from the start of the element expressed as a percentage of
            the total length of the linear object.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="percentageDistanceAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType"
        minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="Period">
  <xs:annotation>
    <xs:documentation>A continuous time period or a set of discontinuous time periods defined by the intersection of a set of criteria
    all within an overall delimiting interval.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="startOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="endOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of a period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="periodName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringTimePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0"
    maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period of a day.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringDayWeekMonthPeriod" type="D2LogicalModel:DayWeekMonth" minOccurs="0"
    maxOccurs="unbounded">

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    <xs:annotation>
      <xs:documentation>A recurring period defined in terms of days of the week, weeks of the month and months of the year.
</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="periodExtension" type="D2LogicalModel:_PeriodExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodExtended">
  <xs:annotation>
    <xs:documentation>An extension point for Period offering the possibility to describe special days and public
holidays.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="recurringSpecialDay" type="D2LogicalModel:SpecialDay" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period in terms of special days.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PermitsAndProhibitions">
  <xs:annotation>
    <xs:documentation>Defines sets of action and regulations to specify permitted and prohibited issues.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="activity" type="D2LogicalModel:RestAreaActivityEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>An activity, which is regulated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="regulation" type="D2LogicalModel:RegulationEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Regulation for the specified activity.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="permitsAndProhibitionsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="PermitTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="blueZonePermit">
      <xs:annotation>
        <xs:documentation>Blue zone permit.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="careTakingPermit">
      <xs:annotation>
        <xs:documentation>Permit for care taking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carpoolingPermit">
      <xs:annotation>
        <xs:documentation>A permit for vehicles used for carpooling.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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<xs:enumeration value="carSharingPermit">
  <xs:annotation>
    <xs:documentation>A permit for car sharing vehicles.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="disabledPermit">
  <xs:annotation>
    <xs:documentation>Permit for disabled.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="emergencyVehiclePermit">
  <xs:annotation>
    <xs:documentation>Permit for emergency vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="employeePermit">
  <xs:annotation>
    <xs:documentation>Permit for employees.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fairPermit">
  <xs:annotation>
    <xs:documentation>Permit of a fair.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="governmentPermit">
  <xs:annotation>
    <xs:documentation>Vehicles that have an official parking permission from the appropriate (local)
government.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="maintenanceVehiclePermit">
  <xs:annotation>
    <xs:documentation>Permit for a maintenance vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="residentPermit">
  <xs:annotation>
    <xs:documentation>Permit for a resident.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadWorksPermit">
  <xs:annotation>
    <xs:documentation>Permit for road works.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="specificIdentifiedVehiclePermit">
  <xs:annotation>
    <xs:documentation>A specific identified vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxiPermit">
  <xs:annotation>
    <xs:documentation>Permit for a taxi.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other permit.</xs:documentation>
  </xs:annotation>

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    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Point">
  <xs:annotation>
    <xs:documentation>A single geospatial point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NetworkLocation">
      <xs:sequence>
        <xs:element name="tpegPointLocation" type="D2LogicalModel:TpegPointLocation" minOccurs="0" />
        <xs:element name="alertCPoint" type="D2LogicalModel:AlertCPoint" minOccurs="0" />
        <xs:element name="pointAlongLinearElement" type="D2LogicalModel:PointAlongLinearElement" minOccurs="0" />
        <xs:element name="pointByCoordinates" type="D2LogicalModel:PointByCoordinates" minOccurs="0" />
        <xs:element name="pointExtension" type="D2LogicalModel:_PointExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="PointAlongLinearElement">
  <xs:annotation>
    <xs:documentation>A point on a linear element where the linear element is either a part of or the whole of a linear object (i.e. a road), consistent with ISO 19148 definitions.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="administrativeAreaOfPoint" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the road administration area which contains the specified point.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionBoundAtPoint" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow at the specified point in terms of general destination
direction.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionRelativeAtPoint" type="D2LogicalModel:LinearReferencingDirectionEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow at the specified point relative to the direction in which the linear element is
defined.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightGradeOfPoint" type="D2LogicalModel:HeightGradeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of whether the point on the linear element is at, above or below the normal elevation of a
linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade"
separation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearElement" type="D2LogicalModel:LinearElement" />
    <xs:element name="distanceAlongLinearElement" type="D2LogicalModel:DistanceAlongLinearElement" />
    <xs:element name="pointAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PointByCoordinates">
  <xs:annotation>
    <xs:documentation>A single point defined only by a coordinate set with an optional bearing direction.</xs:documentation>
  </xs:annotation>

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</xs:annotation>
<xs:sequence>
  <xs:element name="bearing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>A bearing at the point measured in degrees (0 - 359). Unless otherwise specified the reference direction
corresponding to 0 degrees is North.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
  <xs:element name="pointByCoordinatesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PointCoordinates">
  <xs:annotation>
    <xs:documentation>A pair of coordinates defining the geodetic position of a single point using the European Terrestrial Reference
System 1989 (ETRS89).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="latitude" type="D2LogicalModel:Float" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Latitude in decimal degrees using the European Terrestrial Reference System 1989
(ETRS89).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="longitude" type="D2LogicalModel:Float" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Longitude in decimal degrees using the European Terrestrial Reference System 1989
(ETRS89).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinatesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PointDestination">
  <xs:annotation>
    <xs:documentation>The specification of the destination of a defined route or itinerary which is a point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Destination">
      <xs:sequence>
        <xs:element name="point" type="D2LogicalModel:Point" />
        <xs:element name="pointDestinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="PointExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'Point' to support the description of junctions (and other alternative point
descriptions).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="description" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Textual description for a point location</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="junction" type="D2LogicalModel:Junction" minOccurs="0" />
  </xs:sequence>

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</xs:complexType>
<xs:complexType name="PolygonArea">
  <xs:annotation>
    <xs:documentation>defines points for a closed polygon-shape describing the area</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="sectionName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the polygon area. Especially useful when the area consists of more than one
polygon.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinates" type="D2LogicalModel:_PolygonAreaIndexPointCoordinates" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="polygonAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicEventType2Enum">
  <xs:annotation>
    <xs:documentation>Additional types for a public event.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="openAirConcert">
      <xs:annotation>
        <xs:documentation>Open air concert</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="soundAndLightShow">
      <xs:annotation>
        <xs:documentation>Sound and light show.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="artEvent">
      <xs:annotation>
        <xs:documentation>Art event</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="flowerEvent">
      <xs:annotation>
        <xs:documentation>Flower event</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="beerFestival">
      <xs:annotation>
        <xs:documentation>Beer festival</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="foodFestival">
      <xs:annotation>
        <xs:documentation>Food festival</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wineFestival">
      <xs:annotation>
        <xs:documentation>Wine festival</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="theatricalEvent">
      <xs:annotation>
```

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    <xs:documentation>Theatrical event</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireworkDisplay">
  <xs:annotation>
    <xs:documentation>Firework display</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="streetFestival">
  <xs:annotation>
    <xs:documentation>Street festival</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="filmFestival">
  <xs:annotation>
    <xs:documentation>Film festival</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Service provider does not know at time of message generation.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other kind of public event.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="PublicEventTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public events.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalShow">
      <xs:annotation>
        <xs:documentation>Agricultural show or event which could disrupt traffic.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="airShow">
      <xs:annotation>
        <xs:documentation>Air show or other aeronautical event which could disrupt traffic.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="athleticsMeeting">
      <xs:annotation>
        <xs:documentation>Athletics event that could disrupt traffic.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="commercialEvent">
      <xs:annotation>
        <xs:documentation>Commercial event which could disrupt traffic.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="culturalEvent">
      <xs:annotation>
        <xs:documentation>Cultural event which could disrupt traffic.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="ballGame">
  <xs:annotation>
    <xs:documentation>Ball game event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="baseballGame">
  <xs:annotation>
    <xs:documentation>Baseball game event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="basketballGame">
  <xs:annotation>
    <xs:documentation>Basketball game event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bicycleRace">
  <xs:annotation>
    <xs:documentation>Bicycle race that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="boatRace">
  <xs:annotation>
    <xs:documentation>Regatta (boat race event of sailing, powerboat or rowing) that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="boatShow">
  <xs:annotation>
    <xs:documentation>Boat show which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="boxingTournament">
  <xs:annotation>
    <xs:documentation>Boxing event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bullFight">
  <xs:annotation>
    <xs:documentation>Bull fighting event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ceremonialEvent">
  <xs:annotation>
    <xs:documentation>Formal or religious act, rite or ceremony that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="concert">
  <xs:annotation>
    <xs:documentation>Concert event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cricketMatch">
  <xs:annotation>
    <xs:documentation>Cricket match that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="exhibition">
  <xs:annotation>
    <xs:documentation>Major display or trade show which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="fair">
    <xs:annotation>
      <xs:documentation>Periodic (e.g. annual), often traditional, gathering for entertainment or trade promotion, which could disrupt
traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="festival">
    <xs:annotation>
      <xs:documentation>Celebratory event or series of events which could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="filmTVMaking">
    <xs:annotation>
      <xs:documentation>Film or TV making event which could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="footballMatch">
    <xs:annotation>
      <xs:documentation>Football match that could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="funfair">
    <xs:annotation>
      <xs:documentation>Periodic (e.g. annual), often traditional, gathering for entertainment, which could disrupt
traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="gardeningOrFlowerShow">
    <xs:annotation>
      <xs:documentation>Gardening and/or flower show or event which could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="golfTournament">
    <xs:annotation>
      <xs:documentation>Golf tournament event that could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="hockeyGame">
    <xs:annotation>
      <xs:documentation>Hockey game event that could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="horseRaceMeeting">
    <xs:annotation>
      <xs:documentation>Horse race meeting that could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="internationalSportsMeeting">
    <xs:annotation>
      <xs:documentation>Large sporting event of an international nature that could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="majorEvent">
    <xs:annotation>
      <xs:documentation>Significant organised event either on or near the roadway which could disrupt traffic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>

```

```
<xs:enumeration value="marathon">
  <xs:annotation>
    <xs:documentation>Marathon, cross-country or road running event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="market">
  <xs:annotation>
    <xs:documentation>Periodic (e.g. weekly) gathering for buying and selling, which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="match">
  <xs:annotation>
    <xs:documentation>Sports match of unspecified type that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorShow">
  <xs:annotation>
    <xs:documentation>Motor show which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeeting">
  <xs:annotation>
    <xs:documentation>Motor sport race meeting that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parade">
  <xs:annotation>
    <xs:documentation>Formal display or organised procession which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="procession">
  <xs:annotation>
    <xs:documentation>An organised procession which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeeting">
  <xs:annotation>
    <xs:documentation>Race meeting (other than horse or motor sport) that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rugbyMatch">
  <xs:annotation>
    <xs:documentation>Rugby match that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="severalMajorEvents">
  <xs:annotation>
    <xs:documentation>A series of significant organised events either on or near the roadway which could disrupt
traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="show">
  <xs:annotation>
    <xs:documentation>Entertainment event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="showJumping">
  <xs:annotation>
    <xs:documentation>Horse showing jumping and tournament event that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportsMeeting">
  <xs:annotation>
    <xs:documentation>Sports event of unspecified type that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="stateOccasion">
  <xs:annotation>
    <xs:documentation>Public ceremony or visit of national or international significance which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tennisTournament">
  <xs:annotation>
    <xs:documentation>Tennis tournament that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tournament">
  <xs:annotation>
    <xs:documentation>Sporting event or series of events of unspecified type lasting more than one day which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tradeFair">
  <xs:annotation>
    <xs:documentation>A periodic (e.g. annual), often traditional, gathering for trade promotion, which could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="waterSportsMeeting">
  <xs:annotation>
    <xs:documentation>Water sports meeting that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="winterSportsMeeting">
  <xs:annotation>
    <xs:documentation>Winter sports meeting or event (e.g. skiing, ski jumping, skating) that could disrupt traffic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="PublicHoliday">
  <xs:annotation>
    <xs:documentation>Specification of the public holiday type in a specific country or region. Use this component only when specialDayType is set to 'publicHoliday' or 'holidays'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>

```

```

<xs:element name="countrySubdivision" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>ISO 3166-2 country sub-division code (up to 3 characters).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="region" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Region of country (e.g. "Scotland", "Wales" etc. if country = GB) </xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayType" type="D2LogicalModel:PublicHolidayTypeEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the public holiday type for the country or region.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of public holiday, if the enumeration values do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicHolidayTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public holiday.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="betweenChristmasAndNewYear">
      <xs:annotation>
        <xs:documentation>The days between the Christmas and New Year public holidays which are not official public
        holidays.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="boxingDay">
      <xs:annotation>
        <xs:documentation>The day following Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bridgeHoliday">
      <xs:annotation>
        <xs:documentation>A day between a public holiday and the weekend.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasEve">
      <xs:annotation>
        <xs:documentation>The day before Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasDayAndBoxingDay">
      <xs:annotation>
        <xs:documentation>Christmas day and Boxing day (day following Christmas day).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasHolidayPeriod">
      <xs:annotation>
        <xs:documentation>The period between the Christmas and New Year public holidays (inclusive).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="dayFollowingPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day following a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterFridayHoliday">
  <xs:annotation>
    <xs:documentation>Good Friday (the Friday prior to the Easter weekend).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterHolidayPeriod">
  <xs:annotation>
    <xs:documentation>The period between Easter Friday and Easter Monday (inclusive).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterMondayHoliday">
  <xs:annotation>
    <xs:documentation>The Monday following the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSaturday">
  <xs:annotation>
    <xs:documentation>The Saturday of the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSunday">
  <xs:annotation>
    <xs:documentation>Easter Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eveOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>The day preceding a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidayPeriod">
  <xs:annotation>
    <xs:documentation>A holiday period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inLieuOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>A holiday in lieu of a public holiday that falls on a weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="january2ndHoliday">
  <xs:annotation>
    <xs:documentation>The 2nd of January holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsDay">
  <xs:annotation>
    <xs:documentation>New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsEve">
  <xs:annotation>
    <xs:documentation>The day before New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

</xs:enumeration>
<xs:enumeration value="notPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day that is not a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>A public holiday in the respective country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the elements in the list. Public holiday is specified by 'publicHolidayName'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Reference">
  <xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="Referent">
  <xs:annotation>
    <xs:documentation>A referent on a linear object that has a known location such as a node, a reference marker (e.g. a
markerpost), an intersection etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="referentIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The identifier of the referent, unique on the specified linear element (i.e. road or part
of).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the referent, e.g. a junction or intersection name.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentType" type="D2LogicalModel:ReferentTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the referent.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Description of the referent.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" minOccurs="0" />
    <xs:element name="referentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ReferentTypeEnum">
  <xs:annotation>
    <xs:documentation>A set of types of known points along a linear object such as a road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="boundary">

```

```

    <xs:annotation>
      <xs:documentation>A boundary between two jurisdictional or administrative areas. These may be legal boundaries such as
between counties or countries, maintenance responsibility boundaries or control boundaries. </xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="intersection">
    <xs:annotation>
      <xs:documentation>A crossing of two or more roads where the precise point of intersection is defined according to specific
business rules.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="referenceMarker">
    <xs:annotation>
      <xs:documentation>A marker which is usually but not necessarily physical that is one of a sequence which are spaced out
along the linear object (road) to provide a location reference. The spacing of markers is not necessarily even.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="landmark">
    <xs:annotation>
      <xs:documentation>A visible identifiable physical landmark either alongside or close to the linear object.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="roadNode">
    <xs:annotation>
      <xs:documentation>A topological node defined on a road network. Such nodes may delineate the segmentation of the road
network according to defined business rules or may constitute a purely topological representation of a road
network.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="RegulationEnum">
  <xs:annotation>
    <xs:documentation>Regulation parameters for actions.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="permitted">
      <xs:annotation>
        <xs:documentation>Permitted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="prohibited">
      <xs:annotation>
        <xs:documentation>Prohibited.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="punishable">
      <xs:annotation>
        <xs:documentation>The action is prohibited and can be punished.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seasonalHeterogeneous">
      <xs:annotation>
        <xs:documentation>It depends on the season, whether the action is allowed or not.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="permittedOnlyAtParticularTimes">
      <xs:annotation>
        <xs:documentation>Permitted only at particular times.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="permittedOnlyOnParticularAreas">
  <xs:annotation>
    <xs:documentation>Permitted only on particular areas (but inside the parking site ground).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="prohibitedAtParticularTimes">
  <xs:annotation>
    <xs:documentation>Prohibited at particular times.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="prohibitedOnParticularAreas">
  <xs:annotation>
    <xs:documentation>Prohibited on particular areas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyOnRequest">
  <xs:annotation>
    <xs:documentation>Only on request (i.e. permission needed).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heterogeneous">
  <xs:annotation>
    <xs:documentation>The regulation rule is quite complex and cannot be noted here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyOutsideBuildings">
  <xs:annotation>
    <xs:documentation>Only outside buildings.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyInsideBuildings">
  <xs:annotation>
    <xs:documentation>Only inside buildings.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>There is no regulation for this action.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The regulation is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ReservationTypeEnum">
  <xs:annotation>
    <xs:documentation>Reservation type enum.</xs:documentation>
  </xs:annotation>
</xs:simpleType>
</xs:restriction base="xs:string">

```



```

<xs:enumeration value="optional">
  <xs:annotation>
    <xs:documentation>Places can be reserved, but must not.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mandatory">
  <xs:annotation>
    <xs:documentation>Places need to be reserved.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notAvailable">
  <xs:annotation>
    <xs:documentation>Places cannot be reserved.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="partly">
  <xs:annotation>
    <xs:documentation>Some places can or must be reserved, others not (do not use when specifying a single parking
space).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Possibility of reservation is unknown,</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>Possibility of reservation is not specified.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ResponseEnum">
  <xs:annotation>
    <xs:documentation>Types of response that a supplier can return to a requesting client.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="acknowledge">
      <xs:annotation>
        <xs:documentation>An acknowledgement that the supplier has received and complied with the client's
request.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="requestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="subscriptionRequestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a subscription.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="RestAreaActivityEnum">
  <xs:annotation>
    <xs:documentation>Rest area activity enum.</xs:documentation>
  </xs:annotation>

```

```
</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="openFire">
    <xs:annotation>
      <xs:documentation>Open fire.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="overnightParking">
    <xs:annotation>
      <xs:documentation>Overnight parking.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="picnic">
    <xs:annotation>
      <xs:documentation>Picnic.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="smoking">
    <xs:annotation>
      <xs:documentation>Smoking.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="camping">
    <xs:annotation>
      <xs:documentation>Camping.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="handlingHazardousMaterial">
    <xs:annotation>
      <xs:documentation>Handling with hazardous material.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="barbecue">
    <xs:annotation>
      <xs:documentation>Barbeque.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="RGBColour">
  <xs:annotation>
    <xs:documentation>An RGB colour described by values for red, green and blue (0..255) as well as an optional
name.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="rgbRedValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The red value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbGreenValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The green value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

```

</xs:element>
<xs:element name="rgbBlueValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The blue value of the RGB colour (0..255).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="colourName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The name of the colour.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="rgbColourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Road">
  <xs:annotation>
    <xs:documentation>Identification of a road by its name, identifier, type ...</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="nameOfRoad" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadIdentifier" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier/number of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="typeOfRoad" type="D2LogicalModel:RoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Type of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadDestination" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Name of some city, area, compass direction or other identification the road is leading to (to determine the
direction in question).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadOrigination" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Name of some city, area, compass direction or other identification this road comes
from.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="distanceToThisRoad" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Distance to the road in metres (from the calling component/object).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="RoadNode">
  <xs:annotation>
    <xs:documentation>A road node as part of the specialised road identified by the name of a junctionon on this
road.</xs:documentation>
  </xs:annotation>

```

```

<xs:complexContent>
  <xs:extension base="D2LogicalModel:Road">
    <xs:sequence>
      <xs:element name="junctionName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>Name of the junction.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="roadNodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="RoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Categorisation of the road type (motorway, main road, ...).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorway">
      <xs:annotation>
        <xs:documentation>Motorway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="trunkRoad">
      <xs:annotation>
        <xs:documentation>Trunk road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mainRoad">
      <xs:annotation>
        <xs:documentation>Main road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Seconds">
  <xs:annotation>
    <xs:documentation>Seconds.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="ServiceFacility">
  <xs:annotation>
    <xs:documentation>One type of service facility that is available on the parking site or located next to it. You can specify the number of this service facility type (e.g. 5 restaurants) as well as the number of subitems (e.g. 200 restaurant places).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingEquipmentOrServiceFacility">
      <xs:sequence>
        <xs:element name="serviceFacilityType" type="D2LogicalModel:ServiceFacilityTypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>One type of service, that is available on the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:element>
<xs:element name="numberOfSubitems" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The quantity of sub items to this service facility type, e.g. the total number of restaurant places or fuel
dispensers etc.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="distanceFromParkingSite" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>If the service facility is not located on the parking site itself, its distance can be specified here in
metres.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="serviceFacilityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="ServiceFacilityTypeEnum">
  <xs:annotation>
    <xs:documentation>Service facilities available on the parking site, parking space or group of parking spaces. In distinction to
equipment, a service is mostly manned.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="hotel">
      <xs:annotation>
        <xs:documentation>A hotel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="motel">
      <xs:annotation>
        <xs:documentation>Hotel on the motorway or other accommodation service.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overnightAccommodation">
      <xs:annotation>
        <xs:documentation>OvernightAccommodation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shop">
      <xs:annotation>
        <xs:documentation>A shop of unspecified kind.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="kiosk">
      <xs:annotation>
        <xs:documentation>Kiosk.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="foodShopping">
      <xs:annotation>
        <xs:documentation>Food shopping.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cafe">
      <xs:annotation>
        <xs:documentation>Cafe.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>

```

```
</xs:enumeration>
<xs:enumeration value="restaurant">
  <xs:annotation>
    <xs:documentation>Restaurant.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="restaurantSelfService">
  <xs:annotation>
    <xs:documentation>A restaurant where people arrange and fetch their meal themselves, this might enclose a
buffet.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorwayRestaurant">
  <xs:annotation>
    <xs:documentation>Restaurant located on a motorway rest area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorwayRestaurantSmall">
  <xs:annotation>
    <xs:documentation>Smaller type of restaurant located on a motorway rest area. Might be with limited
offers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sparePartsShopping">
  <xs:annotation>
    <xs:documentation>Spare parts shopping.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolStation">
  <xs:annotation>
    <xs:documentation>Indicates whether it is possible to get petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleMaintenance">
  <xs:annotation>
    <xs:documentation>Garage repair service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tyreRepair">
  <xs:annotation>
    <xs:documentation>A tyre repair service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="truckRepair">
  <xs:annotation>
    <xs:documentation>Truck repair.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="truckWash">
  <xs:annotation>
    <xs:documentation>Truck wash.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWash">
  <xs:annotation>
    <xs:documentation>Car wash.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmacy">
```

```

    <xs:annotation>
      <xs:documentation>Pharmacy.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="medicalFacility">
    <xs:annotation>
      <xs:documentation>Medical facility.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="police">
    <xs:annotation>
      <xs:documentation>Indicates whether a police station is on site or very close.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="touristInformation">
    <xs:annotation>
      <xs:documentation>Tourist information with employees.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="bikeSharing">
    <xs:annotation>
      <xs:documentation>Bike Sharing.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="docstop">
    <xs:annotation>
      <xs:documentation>The site is part of the Docstop project, http://www.docstoponline.eu, which means medical assistance for professional drivers.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="laundry">
    <xs:annotation>
      <xs:documentation>A possibility for washing clothes (might also be a laundromat with coins).</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="leisureActivities">
    <xs:annotation>
      <xs:documentation>There are leisure activities offered on the site or in the very near surrounding. Use the additional description attribute to give details.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Some other service facility. Use 'otherEquipmentOrServiceFacility' to specify it.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="SpecialDay">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a public holiday (country specific).</xs:documentation>
  </xs:annotation>
</xs:sequence>

```

```

<xs:element name="intersectWithApplicableDays" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>When true, the period is the intersection of applicable days and this special day. When false, the period is
the union of applicable days and this special day.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="specialDayType" type="D2LogicalModel:SpecialDayTypeEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ...</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="specialDayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of a special day, if the enumeration values do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHoliday" type="D2LogicalModel:PublicHoliday" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="specialDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:annotation>
    <xs:documentation>Collection of general types of days.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="bicycleRaceDay">
      <xs:annotation>
        <xs:documentation>Day of local bicycle race.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bullFightDay">
      <xs:annotation>
        <xs:documentation>Day of local bullfight.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carnivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local carnival involving a procession along roads.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="exhibitionDay">
      <xs:annotation>
        <xs:documentation>Day of a local exhibition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="festivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local festival.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="gamesDay">
      <xs:annotation>
        <xs:documentation>Day of local games (e.g. highland games in Scotland).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="horseRaceMeetingDay">
      <xs:annotation>
        <xs:documentation>Day of a local horse race meeting.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```



```

</xs:enumeration>
<xs:enumeration value="huntMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local hunt meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marathonRaceDay">
  <xs:annotation>
    <xs:documentation>Day of local marathon race.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marketDay">
  <xs:annotation>
    <xs:documentation>Day of a local market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local motor sport race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonWorkingDay">
  <xs:annotation>
    <xs:documentation>A non-working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local race meeting (other than horse or motor sport).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regattaDay">
  <xs:annotation>
    <xs:documentation>Day of a local regatta.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="showDay">
  <xs:annotation>
    <xs:documentation>Day of a local show.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportsMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local sports meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="workingDay">
  <xs:annotation>
    <xs:documentation>A working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="schoolDay">
  <xs:annotation>
    <xs:documentation>School day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electionDay">
  <xs:annotation>
    <xs:documentation>Election day.</xs:documentation>
  </xs:annotation>

```

```

    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="publicHoliday">
    <xs:annotation>
      <xs:documentation>Public holiday.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="holidays">
    <xs:annotation>
      <xs:documentation>A day within the school holidays. You can use the PublicHoliday class to specify more
details.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="undefinedDayType">
    <xs:annotation>
      <xs:documentation>UndefinedDayType</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="SpecialLocationParkingSite">
  <xs:annotation>
    <xs:documentation>A parking site which is located at a special location, often associated with some building.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSite">
      <xs:sequence>
        <xs:element name="parkingSpecialLocation" type="D2LogicalModel:ParkingSpecialLocationEnum" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The special location of the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingOtherSpecialLocation" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A special location not available in the enumeration. Use literal 'other' in this case.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="specialLocationParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="SquareMetres">
  <xs:annotation>
    <xs:documentation>Square metres.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>

```

```

<xs:simpleType name="String">
  <xs:annotation>
    <xs:documentation>A character string whose value space is the set of finite-length sequences of characters. Every character has
a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="SupplementaryPositionalDescription">
  <xs:annotation>
    <xs:documentation>A collection of supplementary positional information which improves the precision of the
location.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="locationDescriptor" type="D2LogicalModel:LocationDescriptorEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies a descriptor which helps to identify the specific location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="sequentialRampNumber" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The sequential number of an exit/entrance ramp from a given location in a given direction (normally used to
indicate a specific exit/entrance in a complex junction/intersection).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="affectedCarriagewayAndLanes" type="D2LogicalModel:AffectedCarriagewayAndLanes" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="supplementaryPositionalDescriptionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="locationPrecision" type="D2LogicalModel:MetresAsNonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>Indicates that the location is given with a precision which is better than the stated value in
metres.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:complexType name="TariffsAndPayment">
  <xs:annotation>
    <xs:documentation>A table of charges under various conditions, primary used for parking. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="lastUpdated" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The date/time at which this information was last updated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="acceptedMeansOfPayment" type="D2LogicalModel:MeansOfPaymentEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Method(s) by which the user can make payments. In case of 'paymentCard' use AcceptedPaymentCards to
specify more details.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="paymentMode" type="D2LogicalModel:ParkingPaymentModeEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Modes how to realize the payment ('payAndDisplay', 'payByPrepaidToken', ...).</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

    </xs:annotation>
  </xs:element>
  <xs:element name="paymentAdditionalDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Additional description, for instance instructions or telephone number for paying by
SMS.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="freeOfCharge" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>No fee at all. In this case, no further elements of the tariffs structure are needed.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="reservationFee" type="D2LogicalModel:AmountOfMoney" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>A fee for reservation, if this is uniform for all situations. Can also be 0 to indicate free reservations. This
attribute does not indicate if reservation is available at all and/or mandatory. </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="urlLinkAddress" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
further relevant information may be obtained.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="chargeBand" type="D2LogicalModel:ChargeBand" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="chargeBandByReference" type="D2LogicalModel:ChargeBandByReference" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="acceptedPaymentCards" type="D2LogicalModel:AcceptedPaymentCards" minOccurs="0" />
  <xs:element name="tariffsAndPaymentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="TemperatureCelsius">
  <xs:annotation>
    <xs:documentation>A measure of temperature defined in degrees Celsius.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="Time">
  <xs:annotation>
    <xs:documentation>An instant of time that recurs every day. The value space of time is the space of time of day values as defined
in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:time" />
</xs:simpleType>
<xs:complexType name="TimePeriodByHour">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period within a 24 hour period by times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TimePeriodOfDay">
      <xs:sequence>
        <xs:element name="startTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Start of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>

```

```

    <xs:documentation>End of time period.</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="timePeriodByHourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TimePeriodOfDay" abstract="true">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period of time within a 24 hour period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="timePeriodOfDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Tonnes">
  <xs:annotation>
    <xs:documentation>A measure of weight defined in metric tonnes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="TpegAreaDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing an area location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegDescriptor">
      <xs:sequence>
        <xs:element name="tpegAreaDescriptorType" type="D2LogicalModel:TpegLoc03AreaDescriptorSubtypeEnum" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegAreaDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegAreaLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>A geographic or geometric area defined by a TPEG-Loc structure which may include height information for
additional geospatial discrimination.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegAreaLocationType" type="D2LogicalModel:TpegLoc01AreaLocationSubtypeEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of TPEG location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegHeight" type="D2LogicalModel:TpegHeight" minOccurs="0" />
    <xs:element name="tpegAreaLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegDescriptor" abstract="true">
  <xs:annotation>

```

```

    <xs:documentation>A collection of information providing descriptive references to locations using the TPEG-Loc location
referencing approach.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="descriptor" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>A text string which describes or elaborates the location.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="tppegDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="TpegFramedPoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is framed between two other points on the same road.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointLocation">
      <xs:sequence>
        <xs:element name="tppegFramedPointLocationType" type="D2LogicalModel:TpegLoc01FramedPointLocationSubTypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of TPEG location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="framedPoint" type="D2LogicalModel:TpegNonJunctionPoint">
          <xs:annotation>
            <xs:documentation>A single non junction point on the road network which is framed between two other specified points on
the road network.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="to" type="D2LogicalModel:TpegPoint">
          <xs:annotation>
            <xs:documentation>The location at the down stream end of the section of road which frames the
TPEGFramedPoint.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="from" type="D2LogicalModel:TpegPoint">
          <xs:annotation>
            <xs:documentation>The location at the up stream end of the section of road which frames the
TPEGFramedPoint.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tppegFramedPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegGeometricArea">
  <xs:annotation>
    <xs:documentation>A geometric area defined by a centre point and a radius.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegAreaLocation">
      <xs:sequence>
        <xs:element name="radius" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The radius of the geometric area identified.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:element>
<xs:element name="centrePoint" type="D2LogicalModel:PointCoordinates">
  <xs:annotation>
    <xs:documentation>Centre point of a circular geometric area.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="name" type="D2LogicalModel:TpegAreaDescriptor" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Name of area.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tpegGeometricAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegHeight">
  <xs:annotation>
    <xs:documentation>Height information which provides additional discrimination for the applicable area.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="height" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A measurement of height in metres</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightType" type="D2LogicalModel:TpegLoc04HeightTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A descriptive identification of relative height using TPEG-Loc location referencing.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegHeightExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegJlcPointDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a junction by defining the intersecting roads.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegJlcPointDescriptorType" type="D2LogicalModel:TpegLoc03JlcPointDescriptorSubTypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegJlcPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegJunction">
  <xs:annotation>
    <xs:documentation>A point on the road network which is a road junction point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPoint">

```

```

<xs:sequence>
  <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
  <xs:element name="name" type="D2LogicalModel:TpegJunctionPointDescriptor" minOccurs="0">
    <xs:annotation>
      <xs:documentation>A name which identifies a junction point on the road network</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="ilc" type="D2LogicalModel:TpegIlcPointDescriptor" maxOccurs="3">
    <xs:annotation>
      <xs:documentation>A descriptor for describing a junction by identifying the intersecting roads at a road
junction.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="otherName" type="D2LogicalModel:TpegOtherPointDescriptor" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A descriptive name which helps to identify the junction point.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="tpegJunctionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexType>
<xs:complexType name="TpegJunctionPointDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a point at a junction on a road network.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegJunctionPointDescriptorType"
type="D2LogicalModel:TpegLoc03JunctionPointDescriptorSubtypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegJunctionPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegLinearLocation">
  <xs:annotation>
    <xs:documentation>A linear section along a single road defined between two points on the same road by a TPEG-Loc
structure.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegDirection" type="D2LogicalModel:DirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegLinearLocationType" type="D2LogicalModel:TpegLoc01LinearLocationSubtypeEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of TPEG location.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```



```

<xs:element name="to" type="D2LogicalModel:TpegPoint">
  <xs:annotation>
    <xs:documentation>The location at the down stream end of the linear section of road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="from" type="D2LogicalModel:TpegPoint">
  <xs:annotation>
    <xs:documentation>The location at the up stream end of the linear section of road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tppegLinearLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="TpegLoc01AreaLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of area.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="largeArea">
      <xs:annotation>
        <xs:documentation>A geographic or geometric large area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01FramedPointLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of points on the road network framed by two other points on the same road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="framedPoint">
      <xs:annotation>
        <xs:documentation>A point on the road network framed by two other points on the same road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01LinearLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of linear location.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="segment">
      <xs:annotation>
        <xs:documentation>A segment (or link) of the road network corresponding to the way in which the road operator has segmented
the network.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01SimplePointLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of simple point.</xs:documentation>
  </xs:annotation>

```

```
<xs:restriction base="xs:string">
  <xs:enumeration value="intersection">
    <xs:annotation>
      <xs:documentation>An point on the road network at which one or more roads intersect.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="nonLinkedPoint">
    <xs:annotation>
      <xs:documentation>A point on the road network which is not at a junction or intersection.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03AreaDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing area locations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName">
      <xs:annotation>
        <xs:documentation>Name of an administrative area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="administrativeReferenceName">
      <xs:annotation>
        <xs:documentation>Reference name by which administrative area is known.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="areaName">
      <xs:annotation>
        <xs:documentation>Name of an area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="countyName">
      <xs:annotation>
        <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lakeName">
      <xs:annotation>
        <xs:documentation>Name of a lake.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nationName">
      <xs:annotation>
        <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of a ISO recognised country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="policeForceControlAreaName">
      <xs:annotation>
        <xs:documentation>Name of a police force control area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="regionName">
      <xs:annotation>
        <xs:documentation>Name of a geographic region.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seaName">
```

```

    <xs:annotation>
      <xs:documentation>Name of a sea.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="townName">
    <xs:annotation>
      <xs:documentation>Name of a town.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03IlcPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing a junction by identifying the intersecting roads at a road
junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="tpegIlcName1">
      <xs:annotation>
        <xs:documentation>The name of the road on which the junction point is located.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tpegIlcName2">
      <xs:annotation>
        <xs:documentation>The name of the first intersecting road at the junction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tpegIlcName3">
      <xs:annotation>
        <xs:documentation>The name of the second intersecting road (if one exists) at the junction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03JunctionPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing a point at a road junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="junctionName">
      <xs:annotation>
        <xs:documentation>Name of a road network junction where two or more roads join.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03OtherPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors other than junction names and road descriptors which can help to identify the location of points on
the road network.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName">
      <xs:annotation>

```

```
<xs:documentation>Name of an administrative area.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="administrativeReferenceName">
  <xs:annotation>
    <xs:documentation>Reference name by which an administrative area is known.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="airportName">
  <xs:annotation>
    <xs:documentation>Name of an airport.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="areaName">
  <xs:annotation>
    <xs:documentation>Name of an area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="buildingName">
  <xs:annotation>
    <xs:documentation>Name of a building.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="busStopIdentifier">
  <xs:annotation>
    <xs:documentation>Identifier of a bus stop on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="busStopName">
  <xs:annotation>
    <xs:documentation>Name of a bus stop on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="canalName">
  <xs:annotation>
    <xs:documentation>Name of a canal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="countyName">
  <xs:annotation>
    <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ferryPortName">
  <xs:annotation>
    <xs:documentation>Name of a ferry port.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="intersectionName">
  <xs:annotation>
    <xs:documentation>Name of a road network intersection.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lakeName">
  <xs:annotation>
    <xs:documentation>Name of a lake.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="linkName">
```

```

<xs:annotation>
  <xs:documentation>Name of a road link.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="localLinkName">
  <xs:annotation>
    <xs:documentation>Local name of a road link.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="metroStationName">
  <xs:annotation>
    <xs:documentation>Name of a metro/underground station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nationName">
  <xs:annotation>
    <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of a ISO recognised country.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonLinkedPointName">
  <xs:annotation>
    <xs:documentation>Name of a point on the road network which is not at a junction or intersection. </xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkingFacilityName">
  <xs:annotation>
    <xs:documentation>Name of a parking facility.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pointName">
  <xs:annotation>
    <xs:documentation>Name of a specific point.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pointOfInterestName">
  <xs:annotation>
    <xs:documentation>Name of a general point of interest.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="railwayStation">
  <xs:annotation>
    <xs:documentation>Name of a railway station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regionName">
  <xs:annotation>
    <xs:documentation>Name of a geographic region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="riverName">
  <xs:annotation>
    <xs:documentation>Name of a river.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="seaName">
  <xs:annotation>
    <xs:documentation>Name of a sea.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

<xs:enumeration value="serviceAreaName">
  <xs:annotation>
    <xs:documentation>Name of a service area on a road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tidalRiverName">
  <xs:annotation>
    <xs:documentation>Name of a river which is of a tidal nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="townName">
  <xs:annotation>
    <xs:documentation>Name of a town.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc04HeightTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of height.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="above">
      <xs:annotation>
        <xs:documentation>Height above specified location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aboveSeaLevel">
      <xs:annotation>
        <xs:documentation>Height above mean sea high water level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aboveStreetLevel">
      <xs:annotation>
        <xs:documentation>Height above street level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="at">
      <xs:annotation>
        <xs:documentation>At height of specified location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atSeaLevel">
      <xs:annotation>
        <xs:documentation>At mean sea high water level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atStreetLevel">
      <xs:annotation>
        <xs:documentation>At street level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="below">
      <xs:annotation>

```

```

    <xs:documentation>Height below specified location.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="belowSeaLevel">
  <xs:annotation>
    <xs:documentation>Height below mean sea high water level.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="belowStreetLevel">
  <xs:annotation>
    <xs:documentation>Height below street level.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefined">
  <xs:annotation>
    <xs:documentation>Undefined height reference.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown height reference.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="TpegNamedOnlyArea">
  <xs:annotation>
    <xs:documentation>An area defined by a well-known name.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegAreaLocation">
      <xs:sequence>
        <xs:element name="name" type="D2LogicalModel:TpegAreaDescriptor" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Name of area.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tppegNamedOnlyAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegNonJunctionPoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is not a road junction point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPoint">
      <xs:sequence>
        <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
        <xs:element name="name" type="D2LogicalModel:TpegOtherPointDescriptor" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A descriptive name which helps to identify the non junction point. At least one descriptor must identify the
            road on which the point is located, i.e. must be of type 'linkName' or 'localLinkName'.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:annotation>
  </xs:element>
  <xs:element name="tpegNonJunctionPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegOtherPointDescriptor">
  <xs:annotation>
    <xs:documentation>General descriptor for describing a point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegOtherPointDescriptorType" type="D2LogicalModel:TpegLoc03OtherPointDescriptorSubTypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegOtherPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegPoint" abstract="true">
  <xs:annotation>
    <xs:documentation>A point on the road network which is either a junction point or a non junction point.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegPointDescriptor" abstract="true">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a point location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegDescriptor">
      <xs:sequence>
        <xs:element name="tpegPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegPointLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by a TPEG-Loc structure and which has an associated direction of
traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegDirection" type="D2LogicalModel:DirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>

```



```

</xs:complexType>
<xs:complexType name="TpegSimplePoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is not bounded by any other points on the road
network.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointLocation">
      <xs:sequence>
        <xs:element name="tpegSimplePointLocationType" type="D2LogicalModel:TpegLoc01SimplePointLocationSubtypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of TPEG location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="point" type="D2LogicalModel:TpegPoint">
          <xs:annotation>
            <xs:documentation>A single point defined by a coordinate set and TPEG descriptors.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegSimplePointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="TruckParkingDynamicManagementEnum">
  <xs:annotation>
    <xs:documentation>Dynamic parking mode enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="compactParking">
      <xs:annotation>
        <xs:documentation>Lorries are parking one after the other in different lanes; each lane has a dedicated time of departure (which
might be displayed on a sign gantry).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="queueParking">
      <xs:annotation>
        <xs:documentation>Lorries are parking in queues, one after the other. Each lorry must have an earlier time of departure than all
the lorries behind it.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noDynamicParkingManagement">
      <xs:annotation>
        <xs:documentation>No dynamic parking management.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Some other type of dynamic parking management.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="UrbanParkingSite">
  <xs:annotation>
    <xs:documentation>A parking site in an urban context.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>

```

```

<xs:extension base="D2LogicalModel:ParkingSite">
  <xs:sequence>
    <xs:element name="urbanParkingSiteType" type="D2LogicalModel:UrbanParkingSiteTypeEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of urban parking site.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingZone" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name or identifier of a parking zone this parking site belongs to. To be filled with the string value 'True', if
there is a parking zone with unknown name.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="urbanParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="UrbanParkingSiteTypeEnum">
  <xs:annotation>
    <xs:documentation>The type of an urban parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="onStreetParking">
      <xs:annotation>
        <xs:documentation>Vehicles are parking on the roadside.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="offStreetParking">
      <xs:annotation>
        <xs:documentation>Vehicles are parking off the road, e.g. on a parking space, a car park or some other area designed for
parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>The parking is associated with some other location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UrgencyEnum">
  <xs:annotation>
    <xs:documentation>Degrees of urgency that a receiving client should associate with the disseminate of the information contained
in the publication.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="extremelyUrgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is extremely urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="urgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="normalUrgency">

```

```

    <xs:annotation>
      <xs:documentation>Dissemination of the information is of normal urgency.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Url">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address comprising a compact string of characters for a resource
available on the Internet.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:anyURI" />
</xs:simpleType>
<xs:simpleType name="UserTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of users; used for parking but also for usage of equipment and services.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allUsers">
      <xs:annotation>
        <xs:documentation>All users.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shoppers">
      <xs:annotation>
        <xs:documentation>Shoppers.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="hotelGuests">
      <xs:annotation>
        <xs:documentation>Hotel guests.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="subscribers">
      <xs:annotation>
        <xs:documentation>Subscribers.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="reservationHolders">
      <xs:annotation>
        <xs:documentation>Those who have a valid reservation for the duration of parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seasonTicketHolders">
      <xs:annotation>
        <xs:documentation>Season ticket holders.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="registeredDisabledUsers">
      <xs:annotation>
        <xs:documentation>Registered disabled persons.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="disabled">
      <xs:annotation>
        <xs:documentation>Physically impaired people.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="handicapped">

```

```
<xs:annotation>
  <xs:documentation>Persons with deficiencies in their daily life.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="hearingImpaired">
  <xs:annotation>
    <xs:documentation>People with difficulties to hear.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visuallyImpaired">
  <xs:annotation>
    <xs:documentation>People with difficulties to see.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="wheelchairUsers">
  <xs:annotation>
    <xs:documentation>Wheelchair users.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="elderlyUsers">
  <xs:annotation>
    <xs:documentation>Elderly users.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="families">
  <xs:annotation>
    <xs:documentation>Families.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="men">
  <xs:annotation>
    <xs:documentation>Men.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="women">
  <xs:annotation>
    <xs:documentation>Women.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pregnantWomen">
  <xs:annotation>
    <xs:documentation>Pregnant women.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pensioners">
  <xs:annotation>
    <xs:documentation>Pensioners.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="students">
  <xs:annotation>
    <xs:documentation>Students.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="staff">
  <xs:annotation>
    <xs:documentation>Staff.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

<xs:enumeration value="employees">
  <xs:annotation>
    <xs:documentation>Employees.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="customers">
  <xs:annotation>
    <xs:documentation>Customers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visitors">
  <xs:annotation>
    <xs:documentation>Visitors.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="members">
  <xs:annotation>
    <xs:documentation>Members.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTermParker">
  <xs:annotation>
    <xs:documentation>Short-term parker.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="longTermParker">
  <xs:annotation>
    <xs:documentation>Long-term parker.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overnightParker">
  <xs:annotation>
    <xs:documentation>Overnight parker.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportEventAwaySupporters">
  <xs:annotation>
    <xs:documentation>Sport event away supporters.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportEventHomeSupporters">
  <xs:annotation>
    <xs:documentation>Sport event home supporters.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="residents">
  <xs:annotation>
    <xs:documentation>Local residents.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="commuters">
  <xs:annotation>
    <xs:documentation>Commuters.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkAndRideUsers">
  <xs:annotation>
    <xs:documentation>Users that are changing into public transport at this parking.</xs:documentation>
  </xs:annotation>

```

```

</xs:enumeration>
<xs:enumeration value="parkAndWalkUser">
  <xs:annotation>
    <xs:documentation>Park and walk user.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkAndCycleUser">
  <xs:annotation>
    <xs:documentation>Park and cycle user.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Validity">
  <xs:annotation>
    <xs:documentation>Specification of validity, either explicitly or by a validity time period specification which may be
discontinuous.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="validityStatus" type="D2LogicalModel:ValidityStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of validity, either explicitly overriding the validity time specification or confirming
it.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overrunning" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The activity or action described by the SituationRecord is still in progress, overrunning its planned duration
as indicated in a previous version of this record.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validityTimeSpecification" type="D2LogicalModel:OverallPeriod">
      <xs:annotation>
        <xs:documentation>A specification of periods of validity defined by overall bounding start and end times and the possible
intersection of valid periods with exception periods (exception periods overriding valid periods).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ValidityStatusEnum">
  <xs:annotation>
    <xs:documentation>Values of validity status that can be assigned to a described event, action or item.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="active">
      <xs:annotation>
        <xs:documentation>The described event, action or item is currently active regardless of the definition of the validity time
specification.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>

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    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="suspended">
    <xs:annotation>
      <xs:documentation>The described event, action or item is currently suspended, that is inactive, regardless of the definition of
the validity time specification.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="definedByValidityTimeSpec">
    <xs:annotation>
      <xs:documentation>The validity status of the described event, action or item is in accordance with the definition of the validity
time specification.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleCharacteristics">
  <xs:annotation>
    <xs:documentation>The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="fuelType" type="D2LogicalModel:FuelTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of fuel used by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType" type="D2LogicalModel:LoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of load carried by the vehicle, especially in respect of hazardous loads.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleEquipment" type="D2LogicalModel:VehicleEquipmentEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of equipment in use or on board the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType" type="D2LogicalModel:VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Vehicle type.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleUsage" type="D2LogicalModel:VehicleUsageEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of usage of the vehicle (i.e. for what purpose is the vehicle being used).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristic" type="D2LogicalModel:GrossWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="heightCharacteristic" type="D2LogicalModel:HeightCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="lengthCharacteristic" type="D2LogicalModel:LengthCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="widthCharacteristic" type="D2LogicalModel:WidthCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="heaviestAxleWeightCharacteristic" type="D2LogicalModel:HeaviestAxleWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="numberOfAxlesCharacteristic" type="D2LogicalModel:NumberOfAxlesCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="vehicleCharacteristicsExtension" type="D2LogicalModel:_VehicleCharacteristicsExtensionType"
minOccurs="0" />
  </xs:sequence>
</xs:complexType>

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```

<xs:complexType name="VehicleCharacteristicsExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel
types, load types etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="emissionClassification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>The valid list of entries for this attribute has to be specified between the communication-partners. Usually
it's some country specific classification code for emissions, which must be scored by vehicles to be valid.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="operationFreeOfEmission" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only vehicles that do not produce emissions (e.g. electric driven). Hybrid driven cars are allowed, when
they switch to emission free mode within the considered situation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType2" type="D2LogicalModel:LoadType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Loads currently not supported in 'LoadTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType2" type="D2LogicalModel:VehicleType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Vehicle types currently not supported in 'VehicleTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fuelType2" type="D2LogicalModel:FuelType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Fuel types currently not supported in 'FuelTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleUsage2" type="D2LogicalModel:VehicleUsage2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Usage types currently not supported in 'VehicleUsageTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="VehicleEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle equipment in use or on board.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="notUsingSnowChains">
      <xs:annotation>
        <xs:documentation>Vehicle not using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notUsingSnowChainsOrTyres">
      <xs:annotation>
        <xs:documentation>Vehicle not using either snow tyres or snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowChainsInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```



```

</xs:enumeration>
<xs:enumeration value="snowTyresInUse">
  <xs:annotation>
    <xs:documentation>Vehicle using snow tyres.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="snowChainsOrTyresInUse">
  <xs:annotation>
    <xs:documentation>Vehicle using snow tyres or snow chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withoutSnowTyresOrChainsOnBoard">
  <xs:annotation>
    <xs:documentation>Vehicle which is not carrying on board snow tyres or chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleType2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle types which are currently not supported in vehicleType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorhome">
      <xs:annotation>
        <xs:documentation>Motorhome</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Light goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="minibus">
      <xs:annotation>
        <xs:documentation>Minibus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="smallCar">
      <xs:annotation>
        <xs:documentation>Small car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="largeCar">
      <xs:annotation>
        <xs:documentation>Large car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicleWithTrailer">
      <xs:annotation>
        <xs:documentation>Light goods vehicle with trailer</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicleWithTrailer">

```

```

<xs:annotation>
  <xs:documentation>Heavy goods vehicle with trailer</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyHaulageVehicle">
  <xs:annotation>
    <xs:documentation>Heavy-haulage vehicle</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="passengerCar">
  <xs:annotation>
    <xs:documentation>Passenger car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anyVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle of any type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="articulatedVehicle">
      <xs:annotation>
        <xs:documentation>Articulated vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>Bicycle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bus">
      <xs:annotation>
        <xs:documentation>Bus.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="car">
      <xs:annotation>
        <xs:documentation>Car.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="caravan">
      <xs:annotation>
        <xs:documentation>Caravan.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="carOrLightVehicle">
  <xs:annotation>
    <xs:documentation>Car or light vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithCaravan">
  <xs:annotation>
    <xs:documentation>Car towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithTrailer">
  <xs:annotation>
    <xs:documentation>Car towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="constructionOrMaintenanceVehicle">
  <xs:annotation>
    <xs:documentation>Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry
mounted crane etc.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fourWheelDrive">
  <xs:annotation>
    <xs:documentation>Four wheel drive vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="highSidedVehicle">
  <xs:annotation>
    <xs:documentation>High sided vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lorry">
  <xs:annotation>
    <xs:documentation>Lorry of any type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="moped">
  <xs:annotation>
    <xs:documentation>Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by
normally having pedals).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycle">
  <xs:annotation>
    <xs:documentation>Motorcycle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycleWithSideCar">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle comprising a motorcycle with an attached side car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorscooter">
  <xs:annotation>
    <xs:documentation>Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter
wheels).</xs:documentation>
  </xs:annotation>

```

```
</xs:enumeration>
<xs:enumeration value="tanker">
  <xs:annotation>
    <xs:documentation>Vehicle with large tank for carrying bulk liquids.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="threeWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="trailer">
  <xs:annotation>
    <xs:documentation>Trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tram">
  <xs:annotation>
    <xs:documentation>Tram.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="twoWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Two wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="van">
  <xs:annotation>
    <xs:documentation>Van.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle with catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithoutCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle without catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCaravan">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withEvenNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with even numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withOddNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with odd numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsage2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle usage types which are currently not supported in vehicleUsageType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="cityLogistics">
      <xs:annotation>
        <xs:documentation>Vehicles that are used to deliver goods in a city area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carSharing">
      <xs:annotation>
        <xs:documentation>Vehicles operated by a car-sharing company.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsageEnum">
  <xs:annotation>
    <xs:documentation>Types of usage of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agricultural">
      <xs:annotation>
        <xs:documentation>Vehicle used for agricultural purposes.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="commercial">
      <xs:annotation>
        <xs:documentation>Vehicle which is limited to non-private usage or public transport usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="emergencyServices">
      <xs:annotation>
        <xs:documentation>Vehicle used by the emergency services.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="military">
      <xs:annotation>
        <xs:documentation>Vehicle used by the military.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nonCommercial">
      <xs:annotation>
        <xs:documentation>Vehicle used for non-commercial or private purposes.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="patrol">
      <xs:annotation>
        <xs:documentation>Vehicle used as part of a patrol service, e.g. road operator or automobile association patrol

```

```
vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="recoveryServices">
  <xs:annotation>
    <xs:documentation>Vehicle used to provide a recovery service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadMaintenanceOrConstruction">
  <xs:annotation>
    <xs:documentation>Vehicle used for road maintenance or construction work purposes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadOperator">
  <xs:annotation>
    <xs:documentation>Vehicle used by the road operator.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxi">
  <xs:annotation>
    <xs:documentation>Vehicle used to provide an authorised taxi service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VersionedReference">
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="Volt">
  <xs:annotation>
    <xs:documentation>Volt.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="WeekOfMonthEnum">
  <xs:annotation>
    <xs:documentation>Weeks of the month.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeekOfMonth">
      <xs:annotation>
        <xs:documentation>First week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="secondWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Second week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thirdWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Third week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fourthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fourth week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

```

</xs:enumeration>
<xs:enumeration value="fifthWeekOfMonth">
  <xs:annotation>
    <xs:documentation>Fifth week of the month (at most only 3 days and non in February when not a leap year).
</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="WidthCharacteristic">
  <xs:annotation>
    <xs:documentation>Width characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum width of an individual vehicle, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="widthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
</xs:schema>

```

### H.3 Schema for Parking Status Publication

```

<?xml version="1.0" encoding="utf-8" standalone="no"?>
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:D2LogicalModel="http://datex2.eu/schema/2/2_0" version="2.3" targetNamespace="http://datex2.eu/schema/2/2_0"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="_ExtensionType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_GenericPublicationExtensionType">
    <xs:sequence>
      <xs:element name="parkingStatusPublication" type="D2LogicalModel:ParkingStatusPublication" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_MeasurementSiteRecordVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="MeasurementSiteRecord" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ParkingAccessReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:Reference">
        <xs:attribute name="targetClass" use="required" fixed="ParkingAccess" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacilityStatus">
    <xs:sequence>
      <xs:element name="parkingEquipmentOrServiceFacilityStatus" type="D2LogicalModel:ParkingEquipmentOrServiceFacilityStatus"
minOccurs="1" maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="equipmentOrServiceFacilityIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusGroupIndexGroupOfParkingSpacesStatus">
    <xs:sequence>
      <xs:element name="groupOfParkingSpacesStatus" type="D2LogicalModel:GroupOfParkingSpacesStatus" minOccurs="1"
maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="groupIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusParkingSpaceIndexParkingSpaceStatus">
    <xs:sequence>
      <xs:element name="parkingSpaceStatus" type="D2LogicalModel:ParkingSpaceStatus" minOccurs="1" maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusScenarioIndexParkingUsageScenarioStatus">
    <xs:sequence>
      <xs:element name="parkingUsageScenarioStatus" type="D2LogicalModel:ParkingUsageScenarioStatus" minOccurs="1"
maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="scenarioIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordVersionedReference">

```



```

<xs:complexContent>
  <xs:extension base="D2LogicalModel:VersionedReference">
    <xs:attribute name="targetClass" use="required" fixed="ParkingRecord" />
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingRouteDetailsVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRouteDetails" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingTableVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingTable" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PeriodExtensionType">
  <xs:sequence>
    <xs:element name="periodExtended" type="D2LogicalModel:PeriodExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_VehicleCharacteristicsExtensionType">
  <xs:sequence>
    <xs:element name="vehicleCharacteristicsExtended" type="D2LogicalModel:VehicleCharacteristicsExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AreaOfInterestEnum">
  <xs:annotation>
    <xs:documentation>Types of areas of interest.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="continentWide">
      <xs:annotation>
        <xs:documentation>Area of the whole European continent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="national">
      <xs:annotation>
        <xs:documentation>Whole area of the specific country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="neighbouringCountries">
      <xs:annotation>
        <xs:documentation>Area of countries which are neighbouring the one specified.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notSpecified">
      <xs:annotation>
        <xs:documentation>Non specified area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="regional">
      <xs:annotation>

```

```

    <xs:documentation>Area of the local region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Boolean">
  <xs:annotation>
    <xs:documentation>Boolean has the value space required to support the mathematical concept of binary-valued logic: {true,
false}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:boolean" />
</xs:simpleType>
<xs:simpleType name="ComparisonOperatorEnum">
  <xs:annotation>
    <xs:documentation>Logical comparison operations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="equalTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThanOrEqualTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than or equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "less than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThanOrEqualTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "less than or equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ComputationMethodEnum">
  <xs:annotation>
    <xs:documentation>Types of computational methods used in deriving data values for data sets.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="arithmeticAverageOfSamplesBasedOnAFixedNumberOfSamples">
      <xs:annotation>
        <xs:documentation>Arithmetic average of sample values based on a fixed number of samples.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="arithmeticAverageOfSamplesInATimePeriod">
      <xs:annotation>
        <xs:documentation>Arithmetic average of sample values in a time period.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="harmonicAverageOfSamplesInATimePeriod">
  <xs:annotation>
    <xs:documentation>Harmonic average of sample values in a time period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="medianOfSamplesInATimePeriod">
  <xs:annotation>
    <xs:documentation>Median of sample values taken over a time period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="movingAverageOfSamples">
  <xs:annotation>
    <xs:documentation>Moving average of sample values.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ConfidentialityValueEnum">
  <xs:annotation>
    <xs:documentation>Values of confidentiality.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="internalUse">
      <xs:annotation>
        <xs:documentation>For internal use only of the recipient organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noRestriction">
      <xs:annotation>
        <xs:documentation>No restriction on usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthorities">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesAndTrafficOperators">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities and traffic operators.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndPublishers">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators and publishers (service
providers).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndVms">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators, publishers (service providers) and variable message
signs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="CountryEnum">
  <xs:annotation>
    <xs:documentation>List of countries.</xs:documentation>
  </xs:annotation>

```

```
</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="at">
    <xs:annotation>
      <xs:documentation>Austria</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="be">
    <xs:annotation>
      <xs:documentation>Belgium</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="bg">
    <xs:annotation>
      <xs:documentation>Bulgaria</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="ch">
    <xs:annotation>
      <xs:documentation>Switzerland</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="cs">
    <xs:annotation>
      <xs:documentation>Serbia and Montenegro</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="cy">
    <xs:annotation>
      <xs:documentation>Cyprus</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="cz">
    <xs:annotation>
      <xs:documentation>Czech Republic</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="de">
    <xs:annotation>
      <xs:documentation>Germany</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="dk">
    <xs:annotation>
      <xs:documentation>Denmark</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="ee">
    <xs:annotation>
      <xs:documentation>Estonia</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="es">
    <xs:annotation>
      <xs:documentation>Spain</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="fi">
    <xs:annotation>
```

```
<xs:documentation>Finland</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="fo">
  <xs:annotation>
    <xs:documentation>Faroe Islands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
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  <xs:annotation>
    <xs:documentation>France</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gb">
  <xs:annotation>
    <xs:documentation>Great Britain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gg">
  <xs:annotation>
    <xs:documentation>Guernsey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gi">
  <xs:annotation>
    <xs:documentation>Gibraltar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gr">
  <xs:annotation>
    <xs:documentation>Greece</xs:documentation>
  </xs:annotation>
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<xs:enumeration value="hr">
  <xs:annotation>
    <xs:documentation>Croatia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
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  <xs:annotation>
    <xs:documentation>Hungary</xs:documentation>
  </xs:annotation>
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  <xs:annotation>
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  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="im">
  <xs:annotation>
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  </xs:annotation>
</xs:enumeration>
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  <xs:annotation>
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  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="it">
```

```
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  <xs:documentation>Italy</xs:documentation>
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    <xs:documentation>Malta</xs:documentation>
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<xs:enumeration value="nl">
  <xs:annotation>
    <xs:documentation>Netherlands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="no">
  <xs:annotation>
    <xs:documentation>Norway</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

<xs:enumeration value="pl">
  <xs:annotation>
    <xs:documentation>Poland</xs:documentation>
  </xs:annotation>
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<xs:enumeration value="pt">
  <xs:annotation>
    <xs:documentation>Portugal</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ro">
  <xs:annotation>
    <xs:documentation>Romania</xs:documentation>
  </xs:annotation>
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  </xs:annotation>
</xs:enumeration>
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  <xs:annotation>
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  </xs:annotation>
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<xs:enumeration value="sk">
  <xs:annotation>
    <xs:documentation>Slovakia</xs:documentation>
  </xs:annotation>
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<xs:enumeration value="sm">
  <xs:annotation>
    <xs:documentation>San Marino</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tr">
  <xs:annotation>
    <xs:documentation>Turkey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="va">
  <xs:annotation>
    <xs:documentation>Vatican City State</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:element name="d2LogicalModel" type="D2LogicalModel:D2LogicalModel" />
<xs:complexType name="D2LogicalModel">
  <xs:annotation>
    <xs:documentation>The DATEX II logical model comprising exchange, content payload and management sub-
models.</xs:documentation>
  </xs:annotation>
</xs:sequence>

```

```

<xs:element name="exchange" type="D2LogicalModel:Exchange" />
<xs:element name="payloadPublication" type="D2LogicalModel:PayloadPublication" minOccurs="0" />
<xs:element name="d2LogicalModelExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="modelBaseVersion" use="required" fixed="2" />
</xs:complexType>
<xs:complexType name="DataValue" abstract="true">
  <xs:annotation>
    <xs:documentation>A data value of something that can be measured or calculated. Any provided meta-data values specified in the
    attributes override any specified generic characteristics such as defined for a specific measurement in the MeasurementSiteTable.
  </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="dataError" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indication of whether the value is deemed to be erroneous by the supplier, (true = erroneous). If not present
        the data value is assumed to be ok. This may be used when automatic fault detection information relating to sensors is
        available.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="reasonForDataError" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The reason why the value is deemed to be erroneous by the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dataValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="accuracy" type="D2LogicalModel:Percentage" use="optional">
    <xs:annotation>
      <xs:documentation>The extent to which the value is expected to be free from error, measured as a percentage of the data value.
      100% means fully accurate.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="computationalMethod" type="D2LogicalModel:ComputationMethodEnum" use="optional">
    <xs:annotation>
      <xs:documentation>Method of computation which has been used to compute this data value.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="numberOfIncompleteInputs" type="D2LogicalModel:NonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>The number of inputs detected but not completed during the sampling or measurement period; e.g. vehicles
      detected entering but not exiting the detection zone.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="numberOfInputValuesUsed" type="D2LogicalModel:NonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>The number of input values used in the sampling or measurement period to determine the data
      value.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="smoothingFactor" type="D2LogicalModel:Float" use="optional">
    <xs:annotation>
      <xs:documentation>Coefficient required when a moving average is computed to give specific weights to the former average and
      the new data. A typical formula is, F being the smoothing factor: New average = (old average) F + (new data) (1 -
      F).</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="standardDeviation" type="D2LogicalModel:Float" use="optional">
    <xs:annotation>

```



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    <xs:documentation>The standard deviation of the sample of input values from which this value was derived, measured in the
units of the data value. </xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute name="supplierCalculatedDataQuality" type="D2LogicalModel:Percentage" use="optional">
  <xs:annotation>
    <xs:documentation>A measure of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality. The
method of calculation is supplier specific and needs to be agreed between supplier and client.</xs:documentation>
  </xs:annotation>
</xs:attribute>
</xs:complexType>
<xs:simpleType name="DateTime">
  <xs:annotation>
    <xs:documentation>A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property
and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from
UTC.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:dateTime" />
</xs:simpleType>
<xs:simpleType name="DayEnum">
  <xs:annotation>
    <xs:documentation>Days of the week.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="monday">
      <xs:annotation>
        <xs:documentation>Monday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tuesday">
      <xs:annotation>
        <xs:documentation>Tuesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wednesday">
      <xs:annotation>
        <xs:documentation>Wednesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thursday">
      <xs:annotation>
        <xs:documentation>Thursday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="friday">
      <xs:annotation>
        <xs:documentation>Friday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="saturday">
      <xs:annotation>
        <xs:documentation>Saturday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="sunday">
      <xs:annotation>
        <xs:documentation>Sunday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:restriction>
</xs:simpleType>
<xs:complexType name="DayWeekMonth">
  <xs:annotation>
    <xs:documentation>Specification of periods defined by the intersection of days, weeks and months.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableDay" type="D2LogicalModel:DayEnum" minOccurs="0" maxOccurs="7">
      <xs:annotation>
        <xs:documentation>Applicable day of the week. "All days of the week" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableWeek" type="D2LogicalModel:WeekOfMonthEnum" minOccurs="0" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableMonth" type="D2LogicalModel:MonthOfYearEnum" minOccurs="0" maxOccurs="12">
      <xs:annotation>
        <xs:documentation>Applicable month of the year. "All months of the year" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dayWeekMonthExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Exchange">
  <xs:annotation>
    <xs:documentation>Details associated with the management of the exchange between the supplier and the
client.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="keepAlive" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicator that this exchange is due to "keep alive" functionality.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="response" type="D2LogicalModel:ResponseEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the response that the supplier is returning to the requesting client.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="subscriptionReference" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique identifier of the client's subscription with the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="supplierIdentification" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="exchangeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Float">
  <xs:annotation>
    <xs:documentation>A floating point number whose value space consists of the values  $m \times 2^e$ , where m is an integer whose
absolute value is less than  $2^{24}$ , and e is an integer between -149 and 104, inclusive.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:float" />

```

```

</xs:simpleType>
<xs:simpleType name="FuelType2Enum">
  <xs:annotation>
    <xs:documentation>Fuel types that are currently not supported in FuelTypeEnum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="all">
      <xs:annotation>
        <xs:documentation>All sort of fuel is accepted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol95Octane">
      <xs:annotation>
        <xs:documentation>Petrol with 95 octane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol98Octane">
      <xs:annotation>
        <xs:documentation>Petrol with 98 octane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrolLeaded">
      <xs:annotation>
        <xs:documentation>Leaded petrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrolUnleaded">
      <xs:annotation>
        <xs:documentation>Unleaded petrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The sort of fuel is not known.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="FuelTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of fuel used by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="battery">
      <xs:annotation>
        <xs:documentation>Battery.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="biodiesel">
      <xs:annotation>
        <xs:documentation>Biodiesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="diesel">

```

```

<xs:annotation>
  <xs:documentation>Diesel.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="dieselBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Diesel and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ethanol">
  <xs:annotation>
    <xs:documentation>Ethanol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hydrogen">
  <xs:annotation>
    <xs:documentation>Hydrogen.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquidGas">
  <xs:annotation>
    <xs:documentation>Liquid gas of any type including LPG.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lpg">
  <xs:annotation>
    <xs:documentation>Liquid petroleum gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="methane">
  <xs:annotation>
    <xs:documentation>Methane gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Petrol and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GenericPublication">
  <xs:annotation>
    <xs:documentation>A publication used to make level B extensions at the publication level.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">
      <xs:sequence>
        <xs:element name="genericPublicationName" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The name of the generic publication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="genericPublicationExtension" type="D2LogicalModel:_GenericPublicationExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="GrossWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Gross weight characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossVehicleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The gross weight of the vehicle and its load, including any trailers.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfParkingSitesStatus">
  <xs:annotation>
    <xs:documentation>Dynamic status information for the static object 'GroupOfParkingSites'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecordStatus">
      <xs:sequence>
        <xs:element name="groupOfParkingSitesStatus" type="D2LogicalModel:GroupOfParkingSitesStatusEnum" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The status of the group of parking sites (available spaces or not).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfParkingSitesStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="GroupOfParkingSitesStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the group of parking sites (available spaces or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allParkingsFull">
      <xs:annotation>
        <xs:documentation>All parkings within the group are full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="multiStoreyParkingsFull">
      <xs:annotation>
        <xs:documentation>All multi storey parkings within the group are full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noMoreParkingSpacesAvailable">
      <xs:annotation>
        <xs:documentation>No more parking spaces available within the group.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>

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```

</xs:enumeration>
<xs:enumeration value="enoughSpacesAvailable">
  <xs:annotation>
    <xs:documentation>Enough spaces available within the group.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The status of the group of parking sites is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GroupOfParkingSpacesStatus">
  <xs:annotation>
    <xs:documentation>The status of the assigned parking spaces in the specified parking site, i.e. the status of those spaces assigned for particular types of person or vehicle and/or for specific duration types (e.g. short stay).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingOccupancy">
      <xs:sequence>
        <xs:element name="groupDeclarationValidNow" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Override validity of AssignedParkingSpaces: True = Parking space declaration is valid now; False = Parking space declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is valid).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfParkingSpacesClosed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>True: The group of parking spaces is closed / not accessible. False or omitted: The group of parking spaces is accessible. This is no statement about its occupation.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfParkingSpacesStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="HeaderInformation">
  <xs:annotation>
    <xs:documentation>Management information relating to the data contained within a publication.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="areaOfInterest" type="D2LogicalModel:AreaOfInterestEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent of the geographic area to which the related information should be distributed.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="confidentiality" type="D2LogicalModel:ConfidentialityValueEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent to which the related information may be circulated, according to the recipient type. Recipients must comply with this confidentiality statement.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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```

</xs:annotation>
</xs:element>
<xs:element name="informationStatus" type="D2LogicalModel:InformationStatusEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The status of the related information (real, test, exercise ....).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urgency" type="D2LogicalModel:UrgencyEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>This indicates the urgency with which a message recipient or Client should distribute the enclosed information. Urgency particularly relates to functions within RDS-TMC applications. </xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="headerInformationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaviestAxleWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Weight characteristic of the heaviest axle on the vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The weight of the heaviest axle on the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="HeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Height characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="InformationStatusEnum">
  <xs:annotation>
    <xs:documentation>Status of the related information (i.e. real, test or exercise).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="real">

```

```

<xs:annotation>
  <xs:documentation>The information is real. It is not a test or exercise.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="securityExercise">
  <xs:annotation>
    <xs:documentation>The information is part of an exercise which is for testing security.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="technicalExercise">
  <xs:annotation>
    <xs:documentation>The information is part of an exercise which includes tests of associated technical
subsystems.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="test">
  <xs:annotation>
    <xs:documentation>The information is part of a test for checking the exchange of this type of information.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Integer">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {-2147483648, -2147483647, -2147483646, ..., -2, -1, 0, 1, 2,
..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:integer" />
</xs:simpleType>
<xs:complexType name="InternationalIdentifier">
  <xs:annotation>
    <xs:documentation>An identifier/name whose range is specific to the particular country.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="nationalIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier or name unique within the specified country.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="internationalIdentifierExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Language">
  <xs:annotation>
    <xs:documentation>A language datatype, identifies a specified language by an ISO 639-1 2-alpha / ISO 639-2 3-alpha
code.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:language" />
</xs:simpleType>
<xs:complexType name="LengthCharacteristic">
  <xs:annotation>
    <xs:documentation>Length characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>

```



```

<xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleLength" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The overall distance between the front and back of an individual vehicle, including the length of any trailers,
couplings, etc.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="lengthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="LoadType2Enum">
  <xs:annotation>
    <xs:documentation>Loads that are currently not supported in loadType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="refrigeratedGoods">
      <xs:annotation>
        <xs:documentation>Refrigerated goods.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of load carried by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abnormalLoad">
      <xs:annotation>
        <xs:documentation>A load that exceeds normal vehicle dimensions in terms of height, length, width, gross vehicle weight or
axle weight or any combination of these. Generally termed an "abnormal load".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ammunition">
      <xs:annotation>
        <xs:documentation>Ammunition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chemicals">
      <xs:annotation>
        <xs:documentation>Chemicals of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="combustibleMaterials">
      <xs:annotation>
        <xs:documentation>Combustible materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="corrosiveMaterials">
      <xs:annotation>
        <xs:documentation>Corrosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="debris">
      <xs:annotation>

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```
<xs:documentation>Debris of unspecified type.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="empty">
  <xs:annotation>
    <xs:documentation>No load.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="explosiveMaterials">
  <xs:annotation>
    <xs:documentation>Explosive materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraHighLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional height.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraLongLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional length.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraWideLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional width.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fuel">
  <xs:annotation>
    <xs:documentation>Fuel of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="glass">
  <xs:annotation>
    <xs:documentation>Glass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="goods">
  <xs:annotation>
    <xs:documentation>Any goods of a commercial nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hazardousMaterials">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a hazardous nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquid">
  <xs:annotation>
    <xs:documentation>Liquid of an unspecified nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="livestock">
  <xs:annotation>
    <xs:documentation>Livestock.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materials">
```

```

<xs:annotation>
  <xs:documentation>General materials of unspecified type.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForPeople">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a danger to people or animals.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForTheEnvironment">
  <xs:annotation>
    <xs:documentation>Materials classed as being potentially dangerous to the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForWater">
  <xs:annotation>
    <xs:documentation>Materials classed as being dangerous when exposed to water (e.g. materials which may react
exothermically with water).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="oil">
  <xs:annotation>
    <xs:documentation>Oil.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ordinary">
  <xs:annotation>
    <xs:documentation>Materials that present limited environmental or health risk. Non-combustible, non-toxic, non-
corrosive.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="perishableProducts">
  <xs:annotation>
    <xs:documentation>Products or produce that will significantly degrade in quality or freshness over a short period of
time.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol or petroleum.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmaceuticalMaterials">
  <xs:annotation>
    <xs:documentation>Pharmaceutical materials.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="radioactiveMaterials">
  <xs:annotation>
    <xs:documentation>Materials that emit significant quantities of electro-magnetic radiation that may present a risk to people,
animals or the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuse">
  <xs:annotation>
    <xs:documentation>Refuse.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="toxicMaterials">

```

```
<xs:annotation>
  <xs:documentation>Materials of a toxic nature which may damage the environment or endanger public
health.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicles">
  <xs:annotation>
    <xs:documentation>Vehicles of any type which are being transported.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MetresAsFloat">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a floating point format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="MonthOfYearEnum">
  <xs:annotation>
    <xs:documentation>A list of the months of the year.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="january">
      <xs:annotation>
        <xs:documentation>The month of January.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="february">
      <xs:annotation>
        <xs:documentation>The month of February.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="march">
      <xs:annotation>
        <xs:documentation>The month of March.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="april">
      <xs:annotation>
        <xs:documentation>The month of April.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="may">
      <xs:annotation>
        <xs:documentation>The month of May.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="june">
      <xs:annotation>
        <xs:documentation>The month of June.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="july">
```

```

    <xs:annotation>
      <xs:documentation>The month of July.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="august">
    <xs:annotation>
      <xs:documentation>The month of August.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="september">
    <xs:annotation>
      <xs:documentation>The month of September.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="october">
    <xs:annotation>
      <xs:documentation>The month of October.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="november">
    <xs:annotation>
      <xs:documentation>The month of November.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="december">
    <xs:annotation>
      <xs:documentation>The month of December.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value" type="D2LogicalModel:MultilingualStringValue" maxOccurs="unbounded" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValueType">
      <xs:attribute name="lang" type="xs:language" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="MultilingualStringValueType">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="NonNegativeInteger">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>

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<xs:restriction base="xs:nonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="NumberOfAxlesCharacteristic">
  <xs:annotation>
    <xs:documentation>Number of axles characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxles" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The total number of axles of an individual vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxlesCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OccupancyChangeValue">
  <xs:annotation>
    <xs:documentation>A measured or calculated value of change of occupied parking spaces expressed as integer.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="occupancyChange" type="D2LogicalModel:Integer" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measured or calculated absolut change of occupied parking spaces within a specified time expressed as integer.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="occupancyChangeValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="OpeningStatusEnum">
  <xs:annotation>
    <xs:documentation>The opening status of some entity (e.g. parking site, service facility, access,...)</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="open">
      <xs:annotation>
        <xs:documentation>Open resp. available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="closed">
      <xs:annotation>
        <xs:documentation>Closed, usually because of the regular opening times.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="closedAbnormal">
      <xs:annotation>
        <xs:documentation>Closed because of some scheduled or unscheduled event, like holiday, maintenance, construction works or any kind of problems. It is possible that the closure will last for some time.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

</xs:enumeration>
<xs:enumeration value="openingTimesInForce">
  <xs:annotation>
    <xs:documentation>The normal opening times are in force, i.e. it is not explicit said if it's open right now.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="statusUnknown">
  <xs:annotation>
    <xs:documentation>The opening status is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="OperationStatusEnum">
  <xs:annotation>
    <xs:documentation>Specifies, whether some scenario or equipment is in operation or not.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="inOperation">
      <xs:annotation>
        <xs:documentation>The specified element is in operation right now.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="limitedOperation">
      <xs:annotation>
        <xs:documentation>The specified element is in operation on a limited basis.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notInOperation">
      <xs:annotation>
        <xs:documentation>The specified element is not operating right now.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notInOperationAbnormal">
      <xs:annotation>
        <xs:documentation>The specified element is not operating due to abnormal conditions (holidays, restoration-works, long-term
closure, ....).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="technicalDefect">
      <xs:annotation>
        <xs:documentation>The specified element is not in operation due to a technical defect.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>There is no information about the operation status.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="OverallPeriod">
  <xs:annotation>
    <xs:documentation>A continuous or discontinuous period of validity defined by overall bounding start and end times and the

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possible intersection of valid periods (potentially recurring) with the complement of exception periods (also potentially recurring).</xs:documentation>

```

</xs:annotation>
<xs:sequence>
  <xs:element name="overallStartTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Start of bounding period of validity defined by date and time.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overallEndTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>End of bounding period of validity defined by date and time.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="validPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is true.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="exceptionPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is false.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overallPeriodExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingAccessStatus">
  <xs:annotation>
    <xs:documentation>The opening and fault status of one access.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="accessReference" type="D2LogicalModel:_ParkingAccessReference" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The reference to an access defined in the static part of the model.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The opening status of this access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessFault" type="D2LogicalModel:ParkingFaultEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A fault indicator for this special access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingAccessStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingConditionsEnum">
  <xs:annotation>
    <xs:documentation>Defines if normal parking conditions are suspended or special parking conditions are in
force.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="normalParkingConditionsSuspended">

```



```

    <xs:annotation>
      <xs:documentation>The parking conditions (possibly including tariffs) that normally apply are temporarily
suspended.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="specialParkingConditionsInForce">
    <xs:annotation>
      <xs:documentation>Parking conditions, other than those that normally apply, are currently in force for the parking
site.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingEquipmentOrServiceFacilityStatus">
  <xs:annotation>
    <xs:documentation>The number of E&S can be overridden here (for example during restoration). Furthermore, the current
availability of E&S can be given (for example number of free electric charging stations). The E&S are identified from the
static model by an index.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="numberOfEquipmentOrServiceFacilityOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Overrides the static value 'numberOfEquipmentOrServiceFacility' (for example because of long- or midterm
closures, such as renovation).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfSubitemsOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Overrides the static value 'numberOfSubitems' (for example because of long- or midterm closures, such as
renovation).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vacantEquipmentOrServiceFacilitySubitems" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Sets the number of currently vacant elements of either equipment (e.g. free toilets) or service facility sub
items (e.g. free restaurant places).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="serviceFacilityOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies whether this service facility is open or not.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="equipmentOperationStatus" type="D2LogicalModel:OperationStatusEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies whether this equipment is available / is in operation or not.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingEquipmentOrServiceFacilityStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0"
/>
  </xs:sequence>
</xs:complexType>

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```
<xs:simpleType name="ParkingFaultEnum">
  <xs:annotation>
    <xs:documentation>Types of parking site or access faults.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="communicationsFailure">
      <xs:annotation>
        <xs:documentation>Communications failure affecting parking site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="barrierMalfunction">
      <xs:annotation>
        <xs:documentation>The entrance or exit barrier(s) are malfunctioning causing access problems to
vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="entranceExitObstructed">
      <xs:annotation>
        <xs:documentation>One or more entrances or exits are obstructed to some degree causing access problems to
vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="erroneousOccupancyInformation">
      <xs:annotation>
        <xs:documentation>Occupancy information is subject to errors due to malfunctioning equipment.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="erroneousOccupancyDisplayed">
      <xs:annotation>
        <xs:documentation>Occupancy information displayed on signs associated with parking site (e.g. at entrance) are
erroneous.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="paymentMachinesInoperative">
      <xs:annotation>
        <xs:documentation>Payment machines are not functioning normally.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="reservationServiceOutOfOrder">
      <xs:annotation>
        <xs:documentation>Reservation service out of order.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noParkingInformationAvailable">
      <xs:annotation>
        <xs:documentation>No parking information available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unspecified">
      <xs:annotation>
        <xs:documentation>General fault of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown parking facility fault.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
```

```

    <xs:annotation>
      <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingOccupancy">
  <xs:annotation>
    <xs:documentation>Parking capacity information for the parking site as well as for AssignedParkingSpaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingNumberOfSpacesOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Possibility to override the static value 'parkingNumberOfSpaces'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The total number of currently vacant parking spaces available in the specified parking site, group of parking
sites or group of parking spaces.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesLowerThan" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vacant parking spaces is lower than the given value (example: Less than 10 spaces are
free).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesHigherThan" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vacant parking spaces is higher than the given value (example: More than 10 spaces are
free).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesGraded" type="D2LogicalModel:ParkingVacantSpacesEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number of vacant spaces by grading (enumeration).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfOccupiedSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of currently occupied spaces in the specified parking site, group of parking sites or assigned
parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVehicles" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number of vehicles (of specified type) on the parking site, the group of parking sites or the group of parking
spaces. Parking too narrow or too wide may effect differences to the 'occupiedSpaces' value. Should not include petrol station
traffic.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingOccupancy" type="D2LogicalModel:Percentage" minOccurs="0" maxOccurs="1">

```

```

    <xs:annotation>
      <xs:documentation>The percentage value of parking spaces occupied in the specified parking site, group of parking sites or
assigned parking.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingOccupancyGraded" type="D2LogicalModel:ParkingOccupancyEnum" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Occupied parking spaces by a percentage-grading (enumeration).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingOccupancyTrend" type="D2LogicalModel:ParkingOccupancyTrendEnum" minOccurs="0"
maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The trend of the occupancy of the parking spaces in the specified parking site, group of parking sites or
assigned parking.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingNotAllowed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>In case of 'true', parking is not allowed (e.g. abnormal closure).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="vehicleCountAndRate" type="D2LogicalModel:VehicleCountAndRate" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingOccupancyExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingOccupancyEnum">
  <xs:annotation>
    <xs:documentation>Parking Occupancy enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="expectCarParkToBeFull">
      <xs:annotation>
        <xs:documentation>Expect car park to be full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage10">
      <xs:annotation>
        <xs:documentation>10% full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage20">
      <xs:annotation>
        <xs:documentation>20% full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage30">
      <xs:annotation>
        <xs:documentation>30% full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage40">
      <xs:annotation>
        <xs:documentation>40% full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage50">
      <xs:annotation>

```

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    <xs:documentation>50% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage60">
  <xs:annotation>
    <xs:documentation>60% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage70">
  <xs:annotation>
    <xs:documentation>70% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage80">
  <xs:annotation>
    <xs:documentation>80% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage90">
  <xs:annotation>
    <xs:documentation>90% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="full">
  <xs:annotation>
    <xs:documentation>Full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingOccupancyTrendEnum">
  <xs:annotation>
    <xs:documentation>List of terms used to describe the trend in parking space occupancy.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="decreasing">
      <xs:annotation>
        <xs:documentation>Parking space occupancy is decreasing.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="increasing">
      <xs:annotation>
        <xs:documentation>Parking space occupancy is increasing.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="stable">
      <xs:annotation>
        <xs:documentation>Parking space occupancy is stable.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="increasingQuickly">
      <xs:annotation>
        <xs:documentation>Parking space occupancy is increasing quickly.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="increasingSlowly">
  <xs:annotation>
    <xs:documentation>Parking space occupancy is increasing slowly.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="decreasingQuickly">
  <xs:annotation>
    <xs:documentation>Parking space occupancy is decreasing quickly.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="decreasingSlowly">
  <xs:annotation>
    <xs:documentation>Parking space occupancy is decreasing slowly.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingRecordStatus" abstract="true">
  <xs:annotation>
    <xs:documentation>Contains the current status of one parking record defined in the static model (i.e. parking site or group of parking sites) or historical or forecasted data for one parking. Only for the second case, 'parkingStatusTime' must be specified.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRecordReference" type="D2LogicalModel:_ParkingRecordVersionedReference" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a static parking record object, i.e. a parking site or a group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusOriginTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The time when the information in this message was generated. Unless 'ParkingStatusValidity' is used, this is also the time the information in this message refers to.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Additional textual information about the parking status. Can also be used as an alternative in case the enumeration values for 'parkingSiteStatus' or 'groupOfParkingSitesStatus' do not fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingQueueingTime" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The current queueing time (duration) for entering the parking site.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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<xs:element name="parkingConditions" type="D2LogicalModel:ParkingConditionsEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Defines if normal parking conditions are suspended or special parking conditions are in
force.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="blurredAvailability" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>When true, all information about availability (free spaces etc.) is blurred (usually because of business
competition).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingFault" type="D2LogicalModel:ParkingFaultEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A fault indicator for the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="winterEquipmentManagementType" type="D2LogicalModel:WinterEquipmentManagementTypeEnum"
minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of winter equipment management action instigated by operator.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSpaceStatus" type="D2LogicalModel:_ParkingRecordStatusParkingSpaceIndexParkingSpaceStatus"
minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingOccupancy" type="D2LogicalModel:ParkingOccupancy" />
<xs:element name="groupOfParkingSpacesStatus"
type="D2LogicalModel:_ParkingRecordStatusGroupIndexGroupOfParkingSpacesStatus" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingStatusValidity" type="D2LogicalModel:ParkingStatusValidity" minOccurs="0" />
<xs:element name="overrideParkingThresholds" type="D2LogicalModel:ParkingThresholds" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Possibility to override the thresholds for the parking, which are in principle defined in the static part of the
model (ParkingStatusPublication).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingEquipmentOrServiceFacilityStatus"
type="D2LogicalModel:_ParkingRecordStatusEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacilityStatus"
minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingUsageScenarioStatus"
type="D2LogicalModel:_ParkingRecordStatusScenarioIndexParkingUsageScenarioStatus" minOccurs="0" maxOccurs="unbounded"
/>
  <xs:element name="parkingAccessStatus" type="D2LogicalModel:ParkingAccessStatus" minOccurs="0" maxOccurs="unbounded"
/>
  <xs:element name="parkingRouteStatus" type="D2LogicalModel:ParkingRouteStatus" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingRecordStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRouteStatus">
  <xs:annotation>
    <xs:documentation>The status of a parking route (active/inactive) defined in the static part of the model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRouteReference" type="D2LogicalModel:_ParkingRouteDetailsVersionedReference" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a parking route.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingRouteActive" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">

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```

    <xs:annotation>
      <xs:documentation>Defines if this parking route is currently active or not.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingRouteStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingSiteOvercrowdingStatusEnum">
  <xs:annotation>
    <xs:documentation>The overcrowding status of the parking site. Choose between two levels or simply (no)
overcrowding.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="overcrowding">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noOvercrowding">
      <xs:annotation>
        <xs:documentation>The parking site is not overcrowded.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overcrowdingLevel1">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded at level 1 (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overcrowdingLevel2">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded at level 2 (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The overcrowding level is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSiteStatus">
  <xs:annotation>
    <xs:documentation>Dynamic status information for the static object 'ParkingSite'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecordStatus">
      <xs:sequence>
        <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>

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    <xs:documentation>The opening status of the parking site (open or not).</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="parkingSiteOvercrowdingStatus" type="D2LogicalModel:ParkingSiteOvercrowdingStatusEnum"
minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The overcrowding status of the parking site. Choose between using a two-stage approach or the more
general statement '(not) overcrowding'. You can sharpen this information by using the 'Thresholds' component. </xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="parkingSiteFullAtFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The parking site is full at the specified floor(s).</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="parkingSiteStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexType>
<xs:simpleType name="ParkingSiteStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="spacesAvailable">
      <xs:annotation>
        <xs:documentation>Parking spaces are currently available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="almostFull">
      <xs:annotation>
        <xs:documentation>The parking site is almost full (as defined by its configuration parameters).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fullAtEntrance">
      <xs:annotation>
        <xs:documentation>The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing
VMS).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="full">
      <xs:annotation>
        <xs:documentation>The parking site is full (as defined by its configuration parameters).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The status of the parking site is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpaceStatus">

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```

<xs:annotation>
  <xs:documentation>Status (occupied or closed) for a single parking space which was defined in the static part of the
model.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="parkingSpaceOccupied" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>True: Parking space is occupied; False: Parking space is free.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingSpaceClosed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>True: The parking space is closed / not accessible. False or omitted: The parking space is accessible. This
is no statement about its occupation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingSpaceDeclarationValidNow" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Override validity of 'ParkingSpace': True = Parking space declaration is valid now; False = Parking space
declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is
valid).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
future time at which a data value is predicted.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="lastCalibration" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Date of last calibration of the detection system in question.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingSpaceStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusColourMapping">
  <xs:annotation>
    <xs:documentation>Defines a pair of 'parkingSiteStatus' and a corresponding colour.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbColour" type="D2LogicalModel:RGBColour" />
    <xs:element name="parkingStatusColourMappingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusPublication">
  <xs:annotation>
    <xs:documentation>A publication containing the current status of one or more parking sites and/or group of parking
sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingTableReference" type="D2LogicalModel:_ParkingTableVersionedReference" minOccurs="0"
maxOccurs="unbounded">

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    <xs:annotation>
      <xs:documentation>It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables
here.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="headerInformation" type="D2LogicalModel:HeaderInformation" minOccurs="0" />
  <xs:element name="parkingRecordStatus" type="D2LogicalModel:ParkingRecordStatus" maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusValidity">
  <xs:annotation>
    <xs:documentation>To be used only for historical or forecasted data. Choose between an explicit point of time, an offset or all
points of time within a specified period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingStatusTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only use for forecasts or historical data to express the point of time for which the information of this parking
is either reported or forecasted. Alternately you can define this point of time as an offset with
'parkingStatusTimeOffsetToOrigin'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusTimeOffsetToOrigin" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only use for forecasts or historical data to express the point of time for which the information of this parking
is either reported or forecasted (in form of an offset in seconds to 'parkingStatusOriginTime'; use negative values for historical data).
</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validityTimeSpecification" type="D2LogicalModel:OverallPeriod" minOccurs="0">
      <xs:annotation>
        <xs:documentation>A specification of periods of validity defined by overall bounding start and end times and the possible
intersection of valid periods with exception periods (exception periods overriding valid periods).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusValidityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingThresholds">
  <xs:annotation>
    <xs:documentation>Configuration parameters of the parking site, used among others for the dynamic attribute 'parkingStatus'.
This component or all elements of it can be overridden in the dynamic model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="almostFullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from
'almost full' to 'spaces available' as the parking site's occupancy decreases. Must be greater than 'almostFullIncreasing'
value.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="almostFullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the state of the site is considered to change from 'spaces
available' to 'almost full' as the site's occupancy increases. Must be lower or equal to 'almostFullDecreasing' and greater
'fullDecreasing'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="entranceFull" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">

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```

    <xs:annotation>
      <xs:documentation>The number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g.
full sign is displayed at entrance or on managing VMS).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="fullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from 'full'
to 'almost full' as the site's occupancy decreases. Must be greater or equal to 'fullIncreasing' value and lower than
'almostFullIncreasing'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="fullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces below which the state of the parking site is considered to change from
'almost full' to 'full' as the site's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowding" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking above which the overcrowding state of the parking site is considered
to change to 'overcrowding'. Can be used as an alternative to the overcrowding level attributes.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowdingLevel1" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'noOvercrowding' to 'overcrowdingLevel1'. Must be lower than the 'overcrowdingLevel2'
value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowdingLevel2" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'overcrowdingLevel1' to 'overcrowdingLevel2'. Must be greater than the 'overcrowdingLevel1'
value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingLastMaximumOccupancy" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The last known occupancy (number of parking vehicles on the site) under safe
conditions.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingStatusColourMapping" type="D2LogicalModel:ParkingStatusColourMapping" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingThresholdsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingUsageScenarioStatus">
  <xs:annotation>
    <xs:documentation>The current status for this parking usage scenario.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="usageScenarioOperationStatus" type="D2LogicalModel:OperationStatusEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The current status for this parking usage scenario.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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```

    </xs:annotation>
  </xs:element>
  <xs:element name="parkingUsageScenarioStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingVacantSpacesEnum">
  <xs:annotation>
    <xs:documentation>Parking vacant spaces enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="noParkingSpacesAvailable">
      <xs:annotation>
        <xs:documentation>No parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="expectNoSpacesAvailable">
      <xs:annotation>
        <xs:documentation>Expect no parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="onlyAFewSpacesAvailable">
      <xs:annotation>
        <xs:documentation>Only a few parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan10SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 10 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan20SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 20 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan30SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 30 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan40SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 40 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan50SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 50 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:annotation>
    <xs:documentation>A payload publication of traffic related information or associated management information created at a specific
point in time that can be exchanged via a DATEX II interface.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="publicationTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date/time at which the payload publication was created.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicationCreator" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="payloadPublicationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language" use="required">
    <xs:annotation>
      <xs:documentation>The default language used throughout the payload publication.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:simpleType name="Percentage">
  <xs:annotation>
    <xs:documentation>A measure of percentage.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="Period">
  <xs:annotation>
    <xs:documentation>A continuous time period or a set of discontinuous time periods defined by the intersection of a set of criteria
all within an overall delimiting interval.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="startOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="endOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of a period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="periodName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringTimePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period of a day.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringDayWeekMonthPeriod" type="D2LogicalModel:DayWeekMonth" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>

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```

    <xs:documentation>A recurring period defined in terms of days of the week, weeks of the month and months of the year.
</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="periodExtension" type="D2LogicalModel:_PeriodExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodExtended">
  <xs:annotation>
    <xs:documentation>An extension point for Period offering the possibility to describe special days and public
holidays.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="recurringSpecialDay" type="D2LogicalModel:SpecialDay" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period in terms of special days.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PublicHoliday">
  <xs:annotation>
    <xs:documentation>Specification of the public holiday type in a specific country or region. Use this component only when
specialDayType is set to 'publicHoliday' or 'holidays'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="countrySubdivision" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-2 country sub-division code (up to 3 characters).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="region" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Region of country (e.g. "Scotland", "Wales" etc. if country = GB) </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayType" type="D2LogicalModel:PublicHolidayTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies the public holiday type for the country or region.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of public holiday, if the enumeration values do not fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicHolidayTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public holiday.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">

```

```
<xs:enumeration value="betweenChristmasAndNewYear">
  <xs:annotation>
    <xs:documentation>The days between the Christmas and New Year public holidays which are not official public
holidays.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="boxingDay">
  <xs:annotation>
    <xs:documentation>The day following Christmas day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bridgeHoliday">
  <xs:annotation>
    <xs:documentation>A day between a public holiday and the weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="christmasEve">
  <xs:annotation>
    <xs:documentation>The day before Christmas day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="christmasDayAndBoxingDay">
  <xs:annotation>
    <xs:documentation>Christmas day and Boxing day (day following Christmas day).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="christmasHolidayPeriod">
  <xs:annotation>
    <xs:documentation>The period between the Christmas and New Year public holidays (inclusive).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dayFollowingPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day following a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterFridayHoliday">
  <xs:annotation>
    <xs:documentation>Good Friday (the Friday prior to the Easter weekend).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterHolidayPeriod">
  <xs:annotation>
    <xs:documentation>The period between Easter Friday and Easter Monday (inclusive).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterMondayHoliday">
  <xs:annotation>
    <xs:documentation>The Monday following the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSaturday">
  <xs:annotation>
    <xs:documentation>The Saturday of the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSunday">
  <xs:annotation>
    <xs:documentation>Easter Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="eveOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>The day preceding a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidayPeriod">
  <xs:annotation>
    <xs:documentation>A holiday period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inLieuOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>A holiday in lieu of a public holiday that falls on a weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="january2ndHoliday">
  <xs:annotation>
    <xs:documentation>The 2nd of January holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsDay">
  <xs:annotation>
    <xs:documentation>New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsEve">
  <xs:annotation>
    <xs:documentation>The day before New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day that is not a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>A public holiday in the respective country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the elements in the list. Public holiday is specified by 'publicHolidayName'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Reference">
  <xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="ResponseEnum">
  <xs:annotation>
    <xs:documentation>Types of response that a supplier can return to a requesting client.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="acknowledge">

```

```

    <xs:annotation>
      <xs:documentation>An acknowledgement that the supplier has received and complied with the client's
request.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="requestDenied">
    <xs:annotation>
      <xs:documentation>A notification that the supplier has denied the client's request for a data.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="subscriptionRequestDenied">
    <xs:annotation>
      <xs:documentation>A notification that the supplier has denied the client's request for a subscription.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="RGBColour">
  <xs:annotation>
    <xs:documentation>An RGB colour described by values for red, green and blue (0..255) as well as an optional
name.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="rgbRedValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The red value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbGreenValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The green value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbBlueValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The blue value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="colourName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the colour.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbColourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Seconds">
  <xs:annotation>
    <xs:documentation>Seconds.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="SpecialDay">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a
public holiday (country specific).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="intersectWithApplicableDays" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">

```

```

    <xs:annotation>
      <xs:documentation>When true, the period is the intersection of applicable days and this special day. When false, the period is
the union of applicable days and this special day.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="specialDayType" type="D2LogicalModel:SpecialDayTypeEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Specification of a special day, for example schoolDay, electionDay, .. .</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="specialDayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Specification of a special day, if the enumeration values do not fit.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="publicHoliday" type="D2LogicalModel:PublicHoliday" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="specialDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:annotation>
    <xs:documentation>Collection of general types of days.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="bicycleRaceDay">
      <xs:annotation>
        <xs:documentation>Day of local bicycle race.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bullFightDay">
      <xs:annotation>
        <xs:documentation>Day of local bullfight.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carnivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local carnival involving a procession along roads.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="exhibitionDay">
      <xs:annotation>
        <xs:documentation>Day of a local exhibition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="festivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local festival.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="gamesDay">
      <xs:annotation>
        <xs:documentation>Day of local games (e.g. highland games in Scotland).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="horseRaceMeetingDay">
      <xs:annotation>
        <xs:documentation>Day of a local horse race meeting.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
<xs:enumeration value="huntMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local hunt meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marathonRaceDay">
  <xs:annotation>
    <xs:documentation>Day of local marathon race.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marketDay">
  <xs:annotation>
    <xs:documentation>Day of a local market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local motor sport race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonWorkingDay">
  <xs:annotation>
    <xs:documentation>A non-working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local race meeting (other than horse or motor sport).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regattaDay">
  <xs:annotation>
    <xs:documentation>Day of a local regatta.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="showDay">
  <xs:annotation>
    <xs:documentation>Day of a local show.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportsMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local sports meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="workingDay">
  <xs:annotation>
    <xs:documentation>A working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="schoolDay">
  <xs:annotation>
    <xs:documentation>School day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electionDay">
  <xs:annotation>
    <xs:documentation>Election day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>Public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidays">
  <xs:annotation>
    <xs:documentation>A day within the school holidays. You can use the PublicHoliday class to specify more
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefinedDayType">
  <xs:annotation>
    <xs:documentation>UndefinedDayType</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="String">
  <xs:annotation>
    <xs:documentation>A character string whose value space is the set of finite-length sequences of characters. Every character has
a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Time">
  <xs:annotation>
    <xs:documentation>An instant of time that recurs every day. The value space of time is the space of time of day values as defined
in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:time" />
</xs:simpleType>
<xs:complexType name="TimePeriodByHour">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period within a 24 hour period by times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TimePeriodOfDay">
      <xs:sequence>
        <xs:element name="startTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Start of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>

```

```

    <xs:documentation>End of time period.</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="timePeriodByHourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TimePeriodOfDay" abstract="true">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period of time within a 24 hour period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="timePeriodOfDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Tonnes">
  <xs:annotation>
    <xs:documentation>A measure of weight defined in metric tonnes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="UrgencyEnum">
  <xs:annotation>
    <xs:documentation>Degrees of urgency that a receiving client should associate with the disseminate of the information contained
in the publication.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="extremelyUrgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is extremely urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="urgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="normalUrgency">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is of normal urgency.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleCharacteristics">
  <xs:annotation>
    <xs:documentation>The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="fuelType" type="D2LogicalModel:FuelTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of fuel used by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType" type="D2LogicalModel:LoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of load carried by the vehicle, especially in respect of hazardous loads.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

</xs:element>
<xs:element name="vehicleEquipment" type="D2LogicalModel:VehicleEquipmentEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The type of equipment in use or on board the vehicle.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleType" type="D2LogicalModel:VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Vehicle type.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleUsage" type="D2LogicalModel:VehicleUsageEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The type of usage of the vehicle (i.e. for what purpose is the vehicle being used).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="grossWeightCharacteristic" type="D2LogicalModel:GrossWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
  <xs:element name="heightCharacteristic" type="D2LogicalModel:HeightCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="lengthCharacteristic" type="D2LogicalModel:LengthCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="widthCharacteristic" type="D2LogicalModel:WidthCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="heaviestAxleWeightCharacteristic" type="D2LogicalModel:HeaviestAxleWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
  <xs:element name="numberOfAxlesCharacteristic" type="D2LogicalModel:NumberOfAxlesCharacteristic" minOccurs="0"
maxOccurs="2" />
  <xs:element name="vehicleCharacteristicsExtension" type="D2LogicalModel:_VehicleCharacteristicsExtensionType"
minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCharacteristicsExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel
types, load types etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="emissionClassification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>The valid list of entries for this attribute has to be specified between the communication-partners. Usually
it's some country specific classification code for emissions, which must be scored by vehicles to be valid.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="operationFreeOfEmission" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only vehicles that do not produce emissions (e.g. electric driven). Hybrid driven cars are allowed, when
they switch to emission free mode within the considered situation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType2" type="D2LogicalModel:LoadType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Loads currently not supported in 'LoadTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType2" type="D2LogicalModel:VehicleType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Vehicle types currently not supported in 'VehicleTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fuelType2" type="D2LogicalModel:FuelType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>

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```

    <xs:documentation>Fuel types currently not supported in 'FuelTypeEnum'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleUsage2" type="D2LogicalModel:VehicleUsage2Enum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Usage types currently not supported in 'VehicleUsageTypeEnum'.</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCountAndRate">
  <xs:annotation>
    <xs:documentation>Vehicle rates can be assigned to a parking site or to assigned parking spaces. Furthermore, they can
reference to a measurement site or to an entrance/exit.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="measurementSiteReference" type="D2LogicalModel:_MeasurementSiteRecordVersionedReference"
minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a versioned measurement site record defined in a Measurement Site
table.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measuredValueIndex" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>If a measurement site is specified, the index of the measured value can be specified
here.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dedicatedAccess" type="D2LogicalModel:_ParkingAccessReference" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further
characteristics can be specified for those objects.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measurementTimeDefault" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The time associated with the set of measurements. It may be the time of the beginning, the end or the
middle of the measurement period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lastCalibration" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date of last calibration of the detection system in question.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="coveringPetrolStationArea" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indication, if this detector also covers the area of a petrol station.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleCountWithinInterval" type="D2LogicalModel:VehicleCountWithinInterval" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="vehicleRate" type="D2LogicalModel:VehicleRate" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="vehicleCountAndRateExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCountValue">
  <xs:annotation>

```



```

    <xs:documentation>A measured or calculated value of absolute count of vehicles within a specified period of time expressed as
non negative integer.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="vehicleCount" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measured or calculated absolute count of vehicles within a specified period of time expressed as non
negative integer.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="vehicleCountValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="VehicleCountWithinInterval">
  <xs:annotation>
    <xs:documentation>Gives incoming and/or outgoing vehicles and/or change of occupied spaces within a given interval. The
interval is given in positive or negative seconds related to 'measurementOrCalculationTime' or
'measurementDefaultTime'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
future time at which a data value is predicted.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measurementInterval" type="D2LogicalModel:Seconds" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Interval for which the data applies. Usually, this value should be negative. Example: - 300 = last 5 minutes
up to 'measurementOrCalculationTime' or 'measurementTimeDefault'. Use a positive value only for predictions. Example: 600 = next
ten minutes.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfIncomingVehicles" type="D2LogicalModel:VehicleCountValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Number of vehicles of specified type that entered the specified parking within the given
interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfOutgoingVehicles" type="D2LogicalModel:VehicleCountValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Number of vehicles of specified type that left the specified parking within the given
interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="changeOfOccupiedSpaces" type="D2LogicalModel:OccupancyChangeValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The change in the number of occupied spaces for specified vehicles within the given interval. Negative
values mean less occupied spaces than at the beginning of the interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="countedVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0" />
    <xs:element name="vehicleCountWithinIntervalExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

```

```

<xs:simpleType name="VehicleEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle equipment in use or on board.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="notUsingSnowChains">
      <xs:annotation>
        <xs:documentation>Vehicle not using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notUsingSnowChainsOrTyres">
      <xs:annotation>
        <xs:documentation>Vehicle not using either snow tyres or snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowChainsInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowTyresInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowChainsOrTyresInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow tyres or snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="withoutSnowTyresOrChainsOnBoard">
      <xs:annotation>
        <xs:documentation>Vehicle which is not carrying on board snow tyres or chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleFlowValue">
  <xs:annotation>
    <xs:documentation>A measured or calculated value of the flow rate of vehicles.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="vehicleFlowRate" type="D2LogicalModel:VehiclesPerHour" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A value of vehicle flow rate expressed in vehicles per hour.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="vehicleFlowValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="VehicleRate">
  <xs:annotation>
    <xs:documentation>Gives information about fill and exit rates OR vehicle flow rate (without direction). If the time stamp is omitted, 'measurementTimeDefault' is used.</xs:documentation>
  </xs:annotation>

```

```

<xs:sequence>
  <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
future time at which a data value is predicted.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="fillRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
    <xs:annotation>
      <xs:documentation>The rate at which vehicles are entering the parking.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="exitRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
    <xs:annotation>
      <xs:documentation>The rate at which vehicles are exiting the parking.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="vehicleFlowRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
    <xs:annotation>
      <xs:documentation>A value of vehicle flow rate expressed in vehicles per hour.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="measuredVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0" />
  <xs:element name="vehicleRateExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="VehiclesPerHour">
  <xs:annotation>
    <xs:documentation>Vehicles per hour.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:simpleType name="VehicleType2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle types which are currently not supported in vehicleType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorhome">
      <xs:annotation>
        <xs:documentation>Motorhome</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Light goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="minibus">
      <xs:annotation>
        <xs:documentation>Minibus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="smallCar">
      <xs:annotation>

```

```
<xs:documentation>Small car</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="largeCar">
  <xs:annotation>
    <xs:documentation>Large car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lightGoodsVehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Light goods vehicle with trailer</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyGoodsVehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Heavy goods vehicle with trailer</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyHaulageVehicle">
  <xs:annotation>
    <xs:documentation>Heavy-haulage vehicle</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="passengerCar">
  <xs:annotation>
    <xs:documentation>Passenger car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anyVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle of any type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="articulatedVehicle">
      <xs:annotation>
        <xs:documentation>Articulated vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>Bicycle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

```

</xs:enumeration>
<xs:enumeration value="bus">
  <xs:annotation>
    <xs:documentation>Bus.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="car">
  <xs:annotation>
    <xs:documentation>Car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="caravan">
  <xs:annotation>
    <xs:documentation>Caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carOrLightVehicle">
  <xs:annotation>
    <xs:documentation>Car or light vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithCaravan">
  <xs:annotation>
    <xs:documentation>Car towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithTrailer">
  <xs:annotation>
    <xs:documentation>Car towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="constructionOrMaintenanceVehicle">
  <xs:annotation>
    <xs:documentation>Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry
mounted crane etc.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fourWheelDrive">
  <xs:annotation>
    <xs:documentation>Four wheel drive vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="highSidedVehicle">
  <xs:annotation>
    <xs:documentation>High sided vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lorry">
  <xs:annotation>
    <xs:documentation>Lorry of any type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="moped">
  <xs:annotation>
    <xs:documentation>Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by
normally having pedals).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycle">

```

```
<xs:annotation>
  <xs:documentation>Motorcycle.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycleWithSideCar">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle comprising a motorcycle with an attached side car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorscooter">
  <xs:annotation>
    <xs:documentation>Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter
wheels).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tanker">
  <xs:annotation>
    <xs:documentation>Vehicle with large tank for carrying bulk liquids.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="threeWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="trailer">
  <xs:annotation>
    <xs:documentation>Trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tram">
  <xs:annotation>
    <xs:documentation>Tram.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="twoWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Two wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="van">
  <xs:annotation>
    <xs:documentation>Van.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle with catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithoutCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle without catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCaravan">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:enumeration>
<xs:enumeration value="vehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withEvenNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with even numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withOddNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with odd numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsage2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle usage types which are currently not supported in vehicleUsageType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="cityLogistics">
      <xs:annotation>
        <xs:documentation>Vehicles that are used to deliver goods in a city area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carSharing">
      <xs:annotation>
        <xs:documentation>Vehicles operated by a car-sharing company.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsageEnum">
  <xs:annotation>
    <xs:documentation>Types of usage of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agricultural">
      <xs:annotation>
        <xs:documentation>Vehicle used for agricultural purposes.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="commercial">
      <xs:annotation>
        <xs:documentation>Vehicle which is limited to non-private usage or public transport usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="emergencyServices">
      <xs:annotation>
        <xs:documentation>Vehicle used by the emergency services.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="military">
  <xs:annotation>
    <xs:documentation>Vehicle used by the military.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonCommercial">
  <xs:annotation>
    <xs:documentation>Vehicle used for non-commercial or private purposes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="patrol">
  <xs:annotation>
    <xs:documentation>Vehicle used as part of a patrol service, e.g. road operator or automobile association patrol
vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="recoveryServices">
  <xs:annotation>
    <xs:documentation>Vehicle used to provide a recovery service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadMaintenanceOrConstruction">
  <xs:annotation>
    <xs:documentation>Vehicle used for road maintenance or construction work purposes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadOperator">
  <xs:annotation>
    <xs:documentation>Vehicle used by the road operator.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxi">
  <xs:annotation>
    <xs:documentation>Vehicle used to provide an authorised taxi service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VersionedReference">
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="WeekOfMonthEnum">
  <xs:annotation>
    <xs:documentation>Weeks of the month.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeekOfMonth">
      <xs:annotation>
        <xs:documentation>First week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="secondWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Second week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thirdWeekOfMonth">
```



```

    <xs:annotation>
      <xs:documentation>Third week of the month.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="fourthWeekOfMonth">
    <xs:annotation>
      <xs:documentation>Fourth week of the month.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="fifthWeekOfMonth">
    <xs:annotation>
      <xs:documentation>Fifth week of the month (at most only 3 days and non in February when not a leap year).
</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="WidthCharacteristic">
  <xs:annotation>
    <xs:documentation>Width characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum width of an individual vehicle, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="widthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="WinterEquipmentManagementTypeEnum">
  <xs:annotation>
    <xs:documentation>Instructions relating to the use of winter equipment.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="doNoUseStudTyres">
      <xs:annotation>
        <xs:documentation>Do not use stud tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowChains">
      <xs:annotation>
        <xs:documentation>Use snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowChainsOrTyres">
      <xs:annotation>
        <xs:documentation>Use snow chains or snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowTyres">
      <xs:annotation>
        <xs:documentation>Use snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>  
<xs:enumeration value="winterEquipmentOnBoardRequired">  
  <xs:annotation>  
    <xs:documentation>The carrying of winter equipment (snow chains and/or snow tyres) is required.</xs:documentation>  
  </xs:annotation>  
</xs:enumeration>  
<xs:enumeration value="other">  
  <xs:annotation>  
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>  
  </xs:annotation>  
</xs:enumeration>  
</xs:restriction>  
</xs:simpleType>  
</xs:schema>
```

DRAFT

## H.4 Schema for Parking Vehicles Publication

```

<?xml version="1.0" encoding="utf-8" standalone="no"?>
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:D2LogicalModel="http://datex2.eu/schema/2/2_0" version="2.3" targetNamespace="http://datex2.eu/schema/2/2_0"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="_ChargeBandVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="ChargeBand" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ExtensionType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_GenericPublicationExtensionType">
    <xs:sequence>
      <xs:element name="parkingVehiclesPublication" type="D2LogicalModel:ParkingVehiclesPublication" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_ParkingRecordVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="ParkingRecord" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ParkingTableVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="ParkingTable" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_PeriodExtensionType">
    <xs:sequence>
      <xs:element name="periodExtended" type="D2LogicalModel:PeriodExtended" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_VehicleCharacteristicsExtensionType">
    <xs:sequence>
      <xs:element name="vehicleCharacteristicsExtended" type="D2LogicalModel:VehicleCharacteristicsExtended" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:simpleType name="AmountOfMoney">
    <xs:annotation>
      <xs:documentation>A monetary value expressed to two decimal places.</xs:documentation>
    </xs:annotation>
    <xs:restriction base="D2LogicalModel:Decimal">
      <xs:totalDigits value="8" />
      <xs:fractionDigits value="2" />
    </xs:restriction>
  </xs:simpleType>

```

```

<xs:complexType name="AxleSpacing">
  <xs:annotation>
    <xs:documentation>The spacing details between the axle sets of an individual vehicle numbered from the front to the back of the vehicle. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="axleSpacing" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The spacing interval, indicated by the axleSpacingSequenceIdentifier, between the axles of an individual vehicle from front to back of the vehicle. </xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="axleSpacingSequenceIdentifier" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the sequence of the interval between the axles of the individual vehicle from front to back (e.g. 1, 2, 3...). This cannot exceed (numberOfAxles -1) if the numberOfAxles is also given as part of the VehicleCharacteristics.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="axleSpacingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AxleWeight">
  <xs:annotation>
    <xs:documentation>The weight details of a specific axle on the vehicle. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="axlePositionIdentifier" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the position of the axle on the vehicle numbered from front to back (i.e. 1, 2, 3...). This cannot exceed the numberOfAxles if provided as part of VehicleCharacteristics.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="axleWeight" type="D2LogicalModel:Tonnes" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The weight of the specific axle, indicated by the axleSequenceIdentifier, on the vehicle numbered from front to back of the vehicle. </xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="maximumPermittedAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum permitted weight of this specific axle on the vehicle.</xs:documentation>
      </xs:annotation>
      </xs:element>
    <xs:element name="axleWeightExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
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  <xs:annotation>
    <xs:documentation>Boolean has the value space required to support the mathematical concept of binary-valued logic: {true, false}. </xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:boolean" />
</xs:simpleType>
<xs:simpleType name="ComparisonOperatorEnum">
  <xs:annotation>
    <xs:documentation>Logical comparison operations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">

```

```

<xs:enumeration value="equalTo">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "equal to".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="greaterThan">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "greater than".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="greaterThanOrEqualTo">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "greater than or equal to".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lessThan">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "less than".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lessThanOrEqualTo">
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    <xs:documentation>Logical comparison operator of "less than or equal to".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="CountryEnum">
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    <xs:documentation>List of countries.</xs:documentation>
  </xs:annotation>
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      <xs:annotation>
        <xs:documentation>Austria</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="be">
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        <xs:documentation>Belgium</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bg">
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    </xs:enumeration>
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      <xs:annotation>
        <xs:documentation>Serbia and Montenegro</xs:documentation>
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    </xs:enumeration>
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      <xs:annotation>

```

```
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<xs:enumeration value="sk">
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```



```

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  </xs:annotation>
</xs:enumeration>
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    <xs:documentation>Turkey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="va">
  <xs:annotation>
    <xs:documentation>Vatican City State</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="CubicMetres">
  <xs:annotation>
    <xs:documentation>A volumetric measure defined in cubic metres.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="CurrencyEnum">
  <xs:annotation>
    <xs:documentation>Three letter code defining the currency according to ISO 4217 (e.g. EUR for Euro). This enumeration only
contains European currencies including the US dollar.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="eur">
      <xs:annotation>
        <xs:documentation>Euro</xs:documentation>
      </xs:annotation>
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    <xs:enumeration value="all">
      <xs:annotation>
        <xs:documentation>Lek (Albania)</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
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      </xs:annotation>
    </xs:enumeration>
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      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bam">
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```

```
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    <xs:documentation>Croatian Kuna</xs:documentation>
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<xs:enumeration value="huf">
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```

```

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  <xs:annotation>
    <xs:documentation>Serbian Dinar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rub">
  <xs:annotation>
    <xs:documentation>Russian Ruble</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sek">
  <xs:annotation>
    <xs:documentation>Swedish Krona</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="try">
  <xs:annotation>
    <xs:documentation>Turkish Lira</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="uah">
  <xs:annotation>
    <xs:documentation>Hryvnia (Ukraine)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="usd">
  <xs:annotation>
    <xs:documentation>US Dollar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Another currency.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>

```

```

<xs:element name="d2LogicalModel" type="D2LogicalModel:D2LogicalModel">
  <xs:unique name="_d2LogicalModelParkingVehicleConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingVehicle" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
</xs:element>
<xs:complexType name="D2LogicalModel">
  <xs:annotation>
    <xs:documentation>The DATEX II logical model comprising exchange, content payload and management sub-
models.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="exchange" type="D2LogicalModel:Exchange" />
    <xs:element name="payloadPublication" type="D2LogicalModel:PayloadPublication" minOccurs="0" />
    <xs:element name="d2LogicalModelExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="modelBaseVersion" use="required" fixed="2" />
</xs:complexType>
<xs:simpleType name="DangerousGoodsRegulationsEnum">
  <xs:annotation>
    <xs:documentation>Types of dangerous goods regulations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="adr">
      <xs:annotation>
        <xs:documentation>European agreement on the international carriage of dangerous goods on road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="iatalcao">
      <xs:annotation>
        <xs:documentation>Regulations covering the international transportation of dangerous goods issued by the International Air
Transport Association and the International Civil Aviation Organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="imolmdg">
      <xs:annotation>
        <xs:documentation>Regulations regarding the transportation of dangerous goods on ocean-going vessels issued by the
International Maritime Organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="railroadDangerousGoodsBook">
      <xs:annotation>
        <xs:documentation>International regulations concerning the international carriage of dangerous goods by
rail.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="DateTime">
  <xs:annotation>
    <xs:documentation>A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property
and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from
UTC.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:dateTime" />
</xs:simpleType>
<xs:simpleType name="DayEnum">
  <xs:annotation>

```

```

    <xs:documentation>Days of the week.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="monday">
      <xs:annotation>
        <xs:documentation>Monday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tuesday">
      <xs:annotation>
        <xs:documentation>Tuesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wednesday">
      <xs:annotation>
        <xs:documentation>Wednesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thursday">
      <xs:annotation>
        <xs:documentation>Thursday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="friday">
      <xs:annotation>
        <xs:documentation>Friday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="saturday">
      <xs:annotation>
        <xs:documentation>Saturday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="sunday">
      <xs:annotation>
        <xs:documentation>Sunday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="DayWeekMonth">
  <xs:annotation>
    <xs:documentation>Specification of periods defined by the intersection of days, weeks and months.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableDay" type="D2LogicalModel:DayEnum" minOccurs="0" maxOccurs="7">
      <xs:annotation>
        <xs:documentation>Applicable day of the week. "All days of the week" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableWeek" type="D2LogicalModel:WeekOfMonthEnum" minOccurs="0" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableMonth" type="D2LogicalModel:MonthOfYearEnum" minOccurs="0" maxOccurs="12">
      <xs:annotation>

```

```

    <xs:documentation>Applicable month of the year. "All months of the year" is expressed by non-inclusion of this
attribute.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dayWeekMonthExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="Decimal">
  <xs:annotation>
    <xs:documentation>A decimal number whose value space is the set of numbers that can be obtained by multiplying an integer by
a non-positive power of ten, i.e., expressible as  $i \times 10^{-n}$  where  $i$  and  $n$  are integers and  $n \geq 0$ .</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:decimal" />
</xs:simpleType>
<xs:complexType name="Exchange">
  <xs:annotation>
    <xs:documentation>Details associated with the management of the exchange between the supplier and the
client.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="keepAlive" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicator that this exchange is due to "keep alive" functionality.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="response" type="D2LogicalModel:ResponseEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the response that the supplier is returning to the requesting client.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="subscriptionReference" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique identifier of the client's subscription with the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="supplierIdentification" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="exchangeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Float">
  <xs:annotation>
    <xs:documentation>A floating point number whose value space consists of the values  $m \times 2^e$ , where  $m$  is an integer whose
absolute value is less than  $2^{24}$ , and  $e$  is an integer between -149 and 104, inclusive.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:float" />
</xs:simpleType>
<xs:simpleType name="FuelType2Enum">
  <xs:annotation>
    <xs:documentation>Fuel types that are currently not supported in FuelTypeEnum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="all">
      <xs:annotation>
        <xs:documentation>All sort of fuel is accepted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol95Octane">
      <xs:annotation>
        <xs:documentation>Petrol with 95 octane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol98Octane">
  <xs:annotation>
    <xs:documentation>Petrol with 98 octane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolLeaded">
  <xs:annotation>
    <xs:documentation>Leaded petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolUnleaded">
  <xs:annotation>
    <xs:documentation>Unleaded petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The sort of fuel is not known.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="FuelTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of fuel used by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="battery">
      <xs:annotation>
        <xs:documentation>Battery.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="biodiesel">
      <xs:annotation>
        <xs:documentation>Biodiesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="diesel">
      <xs:annotation>
        <xs:documentation>Diesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dieselBatteryHybrid">
      <xs:annotation>
        <xs:documentation>Diesel and battery hybrid.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ethanol">
      <xs:annotation>
        <xs:documentation>Ethanol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

<xs:enumeration value="hydrogen">
  <xs:annotation>
    <xs:documentation>Hydrogen.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquidGas">
  <xs:annotation>
    <xs:documentation>Liquid gas of any type including LPG.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lpg">
  <xs:annotation>
    <xs:documentation>Liquid petroleum gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="methane">
  <xs:annotation>
    <xs:documentation>Methane gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Petrol and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GenericPublication">
  <xs:annotation>
    <xs:documentation>A publication used to make level B extensions at the publication level.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">
      <xs:sequence>
        <xs:element name="genericPublicationName" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The name of the generic publication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="genericPublicationExtension" type="D2LogicalModel:_GenericPublicationExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="GrossWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Gross weight characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```



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<xs:element name="grossVehicleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The gross weight of the vehicle and its load, including any trailers.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:sequence>
  <xs:element name="grossWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HazardousMaterials">
  <xs:annotation>
    <xs:documentation>Details of hazardous materials.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chemicalName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The chemical name of the hazardous substance carried by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsFlashPoint" type="D2LogicalModel:TemperatureCelsius" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The temperature at which the vapour from a hazardous substance will ignite in air.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsRegulations" type="D2LogicalModel:DangerousGoodsRegulationsEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The code defining the regulations, international or national, applicable for a means of
transport.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeIdentification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The dangerous goods description code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeVersionNumber" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The version/revision number of date of issuance of the hazardous material code used.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardSubstanceItemPageNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A number giving additional hazard code classification of a goods item within the applicable dangerous
goods regulation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tremCardNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The identification of a transport emergency card giving advice for emergency actions.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="undgNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A unique serial number assigned within the United Nations to substances and articles contained in a list of
the dangerous goods most commonly carried.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="volumeOfDangerousGoods" type="D2LogicalModel:CubicMetres" minOccurs="0" maxOccurs="1">
      <xs:annotation>

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```

    <xs:documentation>The volume of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="weightOfDangerousGoods" type="D2LogicalModel:Tonnes" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The weight of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="hazardousMaterialsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaviestAxleWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Weight characteristic of the heaviest axle on the vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The weight of the heaviest axle on the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heaviestAxleWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="HeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Height characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in
metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="IndexReference">
  <xs:annotation>
    <xs:documentation>A reference to an object given by its index qualifier.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:String" />
</xs:simpleType>
<xs:complexType name="IndividualCharge">
  <xs:annotation>
    <xs:documentation>Information on the individual charge for parking the specified vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>

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```

<xs:element name="chargeBandReference" type="D2LogicalModel:_ChargeBandVersionedReference" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A reference to a charge band.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargePaid" type="D2LogicalModel:AmountOfMoney" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The charge paid for this vehicle. If the vehicle is still parking, it's the charge amount accumulated so
far.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargeCurrency" type="D2LogicalModel:CurrencyEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A three-character code according to ISO 4217 for the currency in which the parking charge is specified (e.g.
EUR, GBP, SEK, CZK).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="usedMeansOfPayment" type="D2LogicalModel:MeansOfPaymentEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The payment method used to pay for this parking vehicle. If it is 'paymentCard', use 'UsedPaymentCard' to
specify more details.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="withReservation" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies, whether there was a reservation made for this vehicle. </xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="usedPaymentCard" type="D2LogicalModel:UsedPaymentCard" minOccurs="0" />
<xs:element name="individualChargeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="InternationalIdentifier">
  <xs:annotation>
    <xs:documentation>An identifier/name whose range is specific to the particular country.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="nationalIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier or name unique within the specified country.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="internationalIdentifierExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Language">
  <xs:annotation>
    <xs:documentation>A language datatype, identifies a specified language by an ISO 639-1 2-alpha / ISO 639-2 3-alpha
code.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:language" />
</xs:simpleType>
<xs:complexType name="LengthCharacteristic">

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```

<xs:annotation>
  <xs:documentation>Length characteristic of a vehicle.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="vehicleLength" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The overall distance between the front and back of an individual vehicle, including the length of any trailers,
couplings, etc.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="lengthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="LoadType2Enum">
  <xs:annotation>
    <xs:documentation>Loads that are currently not supported in loadType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="refrigeratedGoods">
      <xs:annotation>
        <xs:documentation>Refrigerated goods.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of load carried by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abnormalLoad">
      <xs:annotation>
        <xs:documentation>A load that exceeds normal vehicle dimensions in terms of height, length, width, gross vehicle weight or
axle weight or any combination of these. Generally termed an "abnormal load".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ammunition">
      <xs:annotation>
        <xs:documentation>Ammunition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chemicals">
      <xs:annotation>
        <xs:documentation>Chemicals of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="combustibleMaterials">
      <xs:annotation>
        <xs:documentation>Combustible materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="corrosiveMaterials">
      <xs:annotation>
        <xs:documentation>Corrosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="debris">
  <xs:annotation>
    <xs:documentation>Debris of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="empty">
  <xs:annotation>
    <xs:documentation>No load.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="explosiveMaterials">
  <xs:annotation>
    <xs:documentation>Explosive materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraHighLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional height.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraLongLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional length.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraWideLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional width.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fuel">
  <xs:annotation>
    <xs:documentation>Fuel of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="glass">
  <xs:annotation>
    <xs:documentation>Glass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="goods">
  <xs:annotation>
    <xs:documentation>Any goods of a commercial nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hazardousMaterials">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a hazardous nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquid">
  <xs:annotation>
    <xs:documentation>Liquid of an unspecified nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="livestock">
  <xs:annotation>

```

```
<xs:documentation>Livestock.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="materials">
<xs:annotation>
<xs:documentation>General materials of unspecified type.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForPeople">
<xs:annotation>
<xs:documentation>Materials classed as being of a danger to people or animals.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForTheEnvironment">
<xs:annotation>
<xs:documentation>Materials classed as being potentially dangerous to the environment.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForWater">
<xs:annotation>
<xs:documentation>Materials classed as being dangerous when exposed to water (e.g. materials which may react
exothermically with water).</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="oil">
<xs:annotation>
<xs:documentation>Oil.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="ordinary">
<xs:annotation>
<xs:documentation>Materials that present limited environmental or health risk. Non-combustible, non-toxic, non-
corrosive.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="perishableProducts">
<xs:annotation>
<xs:documentation>Products or produce that will significantly degrade in quality or freshness over a short period of
time.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
<xs:annotation>
<xs:documentation>Petrol or petroleum.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmaceuticalMaterials">
<xs:annotation>
<xs:documentation>Pharmaceutical materials.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="radioactiveMaterials">
<xs:annotation>
<xs:documentation>Materials that emit significant quantities of electro-magnetic radiation that may present a risk to people,
animals or the environment.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuse">
<xs:annotation>
```

```

    <xs:documentation>Refuse.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="toxicMaterials">
  <xs:annotation>
    <xs:documentation>Materials of a toxic nature which may damage the environment or endanger public
health.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicles">
  <xs:annotation>
    <xs:documentation>Vehicles of any type which are being transported.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MeansOfPaymentEnum">
  <xs:annotation>
    <xs:documentation>Means of payment</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="paymentCard">
      <xs:annotation>
        <xs:documentation>Payment by electronic card(s). Use 'AcceptedPaymentCards' resp. 'UsedPaymentCard' to specify them
more exactly.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cash">
      <xs:annotation>
        <xs:documentation>Cash payment.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cashCoinsOnly">
      <xs:annotation>
        <xs:documentation>Cash payment with coins only.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="directCashTransfer">
      <xs:annotation>
        <xs:documentation>Direct cash transfer.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electronicSettlement">
      <xs:annotation>
        <xs:documentation>Electronic settlement; includes on board units.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rfid">
      <xs:annotation>
        <xs:documentation>RFID.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mobileApp">
      <xs:annotation>

```

```

    <xs:documentation>Payment method using an app on a smartphone.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payBySMS">
  <xs:annotation>
    <xs:documentation>Payment by SMS. The telephone number can be specified by
'paymentAdditionalDescription'.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mobilePhone">
  <xs:annotation>
    <xs:documentation>A payment method using a mobile phone but without an app or SMS, for instance by calling a
number.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MetresAsFloat">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a floating point format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="MonthOfYearEnum">
  <xs:annotation>
    <xs:documentation>A list of the months of the year.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="january">
      <xs:annotation>
        <xs:documentation>The month of January.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="february">
      <xs:annotation>
        <xs:documentation>The month of February.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="march">
      <xs:annotation>
        <xs:documentation>The month of March.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="april">
      <xs:annotation>
        <xs:documentation>The month of April.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="may">

```



```

<xs:annotation>
  <xs:documentation>The month of May.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="june">
  <xs:annotation>
    <xs:documentation>The month of June.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="july">
  <xs:annotation>
    <xs:documentation>The month of July.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="august">
  <xs:annotation>
    <xs:documentation>The month of August.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="september">
  <xs:annotation>
    <xs:documentation>The month of September.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="october">
  <xs:annotation>
    <xs:documentation>The month of October.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="november">
  <xs:annotation>
    <xs:documentation>The month of November.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="december">
  <xs:annotation>
    <xs:documentation>The month of December.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value" type="D2LogicalModel:MultilingualStringValue" maxOccurs="unbounded" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValue" type="D2LogicalModel:MultilingualStringValue">
      <xs:attribute name="lang" type="xs:language" />
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

```

```

<xs:simpleType name="MultilingualStringValue">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="NonNegativeInteger">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646,
2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:nonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="NumberOfAxlesCharacteristic">
  <xs:annotation>
    <xs:documentation>Number of axles characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxles" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The total number of axles of an individual vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxlesCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OverallPeriod">
  <xs:annotation>
    <xs:documentation>A continuous or discontinuous period of validity defined by overall bounding start and end times and the
possible intersection of valid periods (potentially recurring) with the complement of exception periods (also potentially
recurring).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="overallStartTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overallEndTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is true.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="exceptionPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is false.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

    <xs:element name="overallPeriodExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingPermit">
  <xs:annotation>
    <xs:documentation>A permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingPermitType" type="D2LogicalModel:PermitTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Type of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitScheme" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Scheme of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitIdentifier" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingVehicle">
  <xs:annotation>
    <xs:documentation>Information about one individual parking vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRecordReference" type="D2LogicalModel:_ParkingRecordVersionedReference" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a static parking record object, i.e. a parking site or a group of parking
sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSpaceReference" type="D2LogicalModel:IndexReference" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Points to the parking space, on which the vehicle is located. The reference is only unique in combination
with 'parkingRecordReference'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="groupOfParkingSpacesReference" type="D2LogicalModel:IndexReference" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Points to one or more groups of parking spaces, to which the parking space of the vehicle belongs. The
reference is only unique in combination with 'parkingRecordReference'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermit" type="D2LogicalModel:ParkingPermit" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="vehicle" type="D2LogicalModel:Vehicle" />
    <xs:element name="individualCharge" type="D2LogicalModel:IndividualCharge" minOccurs="0" />
    <xs:element name="parkingPeriod" type="D2LogicalModel:OverallPeriod" minOccurs="0" />
    <xs:element name="parkingVehicleExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />

```

```

</xs:complexType>
<xs:complexType name="ParkingVehiclesPublication">
  <xs:annotation>
    <xs:documentation>Information about individual parking vehicles.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingTableReference" type="D2LogicalModel:_ParkingTableVersionedReference" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables
here.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingVehicle" type="D2LogicalModel:ParkingVehicle" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:annotation>
    <xs:documentation>A payload publication of traffic related information or associated management information created at a specific
point in time that can be exchanged via a DATEX II interface.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="publicationTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date/time at which the payload publication was created.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicationCreator" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="payloadPublicationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language" use="required">
    <xs:annotation>
      <xs:documentation>The default language used throughout the payload publication.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:simpleType name="PaymentCardBrandsEnum">
  <xs:annotation>
    <xs:documentation>Brands of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="americanExpress">
      <xs:annotation>
        <xs:documentation>American Express</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cirrus">
      <xs:annotation>
        <xs:documentation>Cirrus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dinersClub">
      <xs:annotation>
        <xs:documentation>Diners Club</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="discoverCard">
      <xs:annotation>
        <xs:documentation>Discover Card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="giroCard">
  <xs:annotation>
    <xs:documentation>Girocard</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="maestro">
  <xs:annotation>
    <xs:documentation>Maestro</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="masterCard">
  <xs:annotation>
    <xs:documentation>MasterCard</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visa">
  <xs:annotation>
    <xs:documentation>Visa</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vPay">
  <xs:annotation>
    <xs:documentation>V PAY</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="PaymentCardTypesEnum">
  <xs:annotation>
    <xs:documentation>Types of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="creditCard">
      <xs:annotation>
        <xs:documentation>Credit card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="debitCard">
      <xs:annotation>
        <xs:documentation>Debit card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chargeCard">
      <xs:annotation>
        <xs:documentation>Charge card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fleetCard">
      <xs:annotation>
        <xs:documentation>Fleet or petrol station card.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="storedValueCard">
  <xs:annotation>
    <xs:documentation>Stored value card / prepaid card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other type of card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Period">
  <xs:annotation>
    <xs:documentation>A continuous time period or a set of discontinuous time periods defined by the intersection of a set of criteria
all within an overall delimiting interval.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="startOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="endOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of a period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="periodName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringTimePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period of a day.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="recurringDayWeekMonthPeriod" type="D2LogicalModel:DayWeekMonth" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period defined in terms of days of the week, weeks of the month and months of the year.
</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="periodExtension" type="D2LogicalModel:_PeriodExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodExtended">
  <xs:annotation>
    <xs:documentation>An extension point for Period offering the possibility to describe special days and public
holidays.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="recurringSpecialDay" type="D2LogicalModel:SpecialDay" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period in terms of special days.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

</xs:element>
</xs:sequence>
</xs:complexType>
<xs:simpleType name="PermitTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="blueZonePermit">
      <xs:annotation>
        <xs:documentation>Blue zone permit.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="careTakingPermit">
      <xs:annotation>
        <xs:documentation>Permit for care taking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carpoolingPermit">
      <xs:annotation>
        <xs:documentation>A permit for vehicles used for carpooling.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carSharingPermit">
      <xs:annotation>
        <xs:documentation>A permit for car sharing vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="disabledPermit">
      <xs:annotation>
        <xs:documentation>Permit for disabled.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="emergencyVehiclePermit">
      <xs:annotation>
        <xs:documentation>Permit for emergency vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="employeePermit">
      <xs:annotation>
        <xs:documentation>Permit for employees.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fairPermit">
      <xs:annotation>
        <xs:documentation>Permit of a fair.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="governmentPermit">
      <xs:annotation>
        <xs:documentation>Vehicles that have an official parking permission from the appropriate (local)
government.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="maintenanceVehiclePermit">
      <xs:annotation>
        <xs:documentation>Permit for a maintenance vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="residentPermit">
  <xs:annotation>
    <xs:documentation>Permit for a resident.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadWorksPermit">
  <xs:annotation>
    <xs:documentation>Permit for road works.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="specificIdentifiedVehiclePermit">
  <xs:annotation>
    <xs:documentation>A specific identified vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxiPermit">
  <xs:annotation>
    <xs:documentation>Permit for a taxi.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other permit.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="PublicHoliday">
  <xs:annotation>
    <xs:documentation>Specification of the public holiday type in a specific country or region. Use this component only when
specialDayType is set to 'publicHoliday' or 'holidays'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="countrySubdivision" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-2 country sub-division code (up to 3 characters).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="region" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Region of country (e.g. "Scotland", "Wales" etc. if country = GB) </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayType" type="D2LogicalModel:PublicHolidayTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies the public holiday type for the country or region.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of public holiday, if the enumeration values do not fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHolidayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>

```



```

</xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicHolidayTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public holiday.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="betweenChristmasAndNewYear">
      <xs:annotation>
        <xs:documentation>The days between the Christmas and New Year public holidays which are not official public
holidays.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="boxingDay">
      <xs:annotation>
        <xs:documentation>The day following Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bridgeHoliday">
      <xs:annotation>
        <xs:documentation>A day between a public holiday and the weekend.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasEve">
      <xs:annotation>
        <xs:documentation>The day before Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasDayAndBoxingDay">
      <xs:annotation>
        <xs:documentation>Christmas day and Boxing day (day following Christmas day).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasHolidayPeriod">
      <xs:annotation>
        <xs:documentation>The period between the Christmas and New Year public holidays (inclusive).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dayFollowingPublicHoliday">
      <xs:annotation>
        <xs:documentation>A day following a public holiday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterFridayHoliday">
      <xs:annotation>
        <xs:documentation>Good Friday (the Friday prior to the Easter weekend).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterHolidayPeriod">
      <xs:annotation>
        <xs:documentation>The period between Easter Friday and Easter Monday (inclusive).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterMondayHoliday">
      <xs:annotation>
        <xs:documentation>The Monday following the Easter weekend.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterSaturday">

```

```
<xs:annotation>
  <xs:documentation>The Saturday of the Easter weekend.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSunday">
  <xs:annotation>
    <xs:documentation>Easter Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eveOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>The day preceding a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidayPeriod">
  <xs:annotation>
    <xs:documentation>A holiday period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inLieuOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>A holiday in lieu of a public holiday that falls on a weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="january2ndHoliday">
  <xs:annotation>
    <xs:documentation>The 2nd of January holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsDay">
  <xs:annotation>
    <xs:documentation>New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsEve">
  <xs:annotation>
    <xs:documentation>The day before New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day that is not a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>A public holiday in the respective country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the elements in the list. Public holiday is specified by 'publicHolidayName'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ResponseEnum">
  <xs:annotation>
```

```

    <xs:documentation>Types of response that a supplier can return to a requesting client.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="acknowledge">
      <xs:annotation>
        <xs:documentation>An acknowledgement that the supplier has received and complied with the client's
request.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="requestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="subscriptionRequestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a subscription.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="SpecialDay">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a
public holiday (country specific).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="intersectWithApplicableDays" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the period is the intersection of applicable days and this special day. When false, the period is
the union of applicable days and this special day."</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specialDayType" type="D2LogicalModel:SpecialDayTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ..</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specialDayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of a special day, if the enumeration values do not fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHoliday" type="D2LogicalModel:PublicHoliday" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="specialDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:annotation>
    <xs:documentation>Collection of general types of days.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="bicycleRaceDay">
      <xs:annotation>
        <xs:documentation>Day of local bicycle race.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bullFightDay">
      <xs:annotation>

```

```
<xs:documentation>Day of local bullfight.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="carnivalDay">
  <xs:annotation>
    <xs:documentation>Day of a local carnival involving a procession along roads.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="exhibitionDay">
  <xs:annotation>
    <xs:documentation>Day of a local exhibition.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="festivalDay">
  <xs:annotation>
    <xs:documentation>Day of a local festival.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gamesDay">
  <xs:annotation>
    <xs:documentation>Day of local games (e.g. highland games in Scotland).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="horseRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local horse race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="huntMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local hunt meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marathonRaceDay">
  <xs:annotation>
    <xs:documentation>Day of local marathon race.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marketDay">
  <xs:annotation>
    <xs:documentation>Day of a local market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local motor sport race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonWorkingDay">
  <xs:annotation>
    <xs:documentation>A non-working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local race meeting (other than horse or motor sport).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regattaDay">
```

```

<xs:annotation>
  <xs:documentation>Day of a local regatta.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="showDay">
  <xs:annotation>
    <xs:documentation>Day of a local show.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportsMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local sports meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="workingDay">
  <xs:annotation>
    <xs:documentation>A working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="schoolDay">
  <xs:annotation>
    <xs:documentation>School day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electionDay">
  <xs:annotation>
    <xs:documentation>Election day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>Public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidays">
  <xs:annotation>
    <xs:documentation>A day within the school holidays. You can use the PublicHoliday class to specify more
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefinedDayType">
  <xs:annotation>
    <xs:documentation>UndefinedDayType</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="String">
  <xs:annotation>

```

```

    <xs:documentation>A character string whose value space is the set of finite-length sequences of characters. Every character has
    a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TemperatureCelsius">
  <xs:annotation>
    <xs:documentation>A measure of temperature defined in degrees Celsius.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="Time">
  <xs:annotation>
    <xs:documentation>An instant of time that recurs every day. The value space of time is the space of time of day values as defined
    in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:time" />
</xs:simpleType>
<xs:complexType name="TimePeriodByHour">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period within a 24 hour period by times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TimePeriodOfDay">
      <xs:sequence>
        <xs:element name="startTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Start of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>End of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="timePeriodByHourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TimePeriodOfDay" abstract="true">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period of time within a 24 hour period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="timePeriodOfDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Tonnes">
  <xs:annotation>
    <xs:documentation>A measure of weight defined in metric tonnes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="UsedPaymentCard">
  <xs:annotation>
    <xs:documentation>The used payment card for this parking vehicle.</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:sequence>
  <xs:element name="paymentCard" type="D2LogicalModel:PaymentCardTypeEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Use this class to describe details in case usedMeansOfPayment is set to
'paymentCard'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="otherPaymentCard" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The payment card used for this parking vehicle in case the paymentCard attribute is set to
'other'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="paymentCardBrand" type="D2LogicalModel:PaymentCardBrandsEnum" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The payment card brand used for this parking vehicle.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="otherPaymentCardBrand" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The payment card brand used for this parking vehicle in case the paymentCardBrand attribute is set to
'other'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="usedPaymentCardExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Vehicle">
  <xs:annotation>
    <xs:documentation>Details of an individual vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="vehicleColour" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The colour of the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleCountryOfOrigin" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of the country in which the vehicle is registered. The code is the 2-alpha code as given in EN
ISO 3166-1 which is updated by the ISO 3166 Maintenance Agency.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleIdentifier" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A vehicle identification number (VIN) comprising 17 characters that is based on either ISO 3779 or ISO
3780 and uniquely identifies the individual vehicle. This is normally securely attached to the vehicle chassis.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleManufacturer" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the stated manufacturer of the vehicle i.e. Ford.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleModel" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the model (or range name) of the vehicle i.e. Mondeo.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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```

</xs:element>
<xs:element name="vehicleRegistrationPlateIdentifier" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>An identifier or code displayed on a vehicle registration plate attached to the vehicle used for official
identification purposes. The registration identifier is numeric or alphanumeric and is unique within the issuing authority's
region.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleStatus" type="D2LogicalModel:VehicleStatusEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Vehicle status.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleCharacteristics" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0" />
<xs:element name="axleSpacingOnVehicle" type="D2LogicalModel:AxleSpacing" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The spacing between axles on the vehicles.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="specificAxleWeight" type="D2LogicalModel:AxleWeight" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>The weight details relating to a specific axle on the vehicle.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="hazardousGoodsAssociatedWithVehicle" type="D2LogicalModel:HazardousMaterials" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Details of hazardous goods carried by the vehicle.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCharacteristics">
  <xs:annotation>
    <xs:documentation>The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="fuelType" type="D2LogicalModel:FuelTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of fuel used by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType" type="D2LogicalModel:LoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of load carried by the vehicle, especially in respect of hazardous loads.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleEquipment" type="D2LogicalModel:VehicleEquipmentEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of equipment in use or on board the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType" type="D2LogicalModel:VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Vehicle type.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleUsage" type="D2LogicalModel:VehicleUsageEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>

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    <xs:documentation>The type of usage of the vehicle (i.e. for what purpose is the vehicle being used).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="grossWeightCharacteristic" type="D2LogicalModel:GrossWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
<xs:element name="heightCharacteristic" type="D2LogicalModel:HeightCharacteristic" minOccurs="0" maxOccurs="2" />
<xs:element name="lengthCharacteristic" type="D2LogicalModel:LengthCharacteristic" minOccurs="0" maxOccurs="2" />
<xs:element name="widthCharacteristic" type="D2LogicalModel:WidthCharacteristic" minOccurs="0" maxOccurs="2" />
<xs:element name="heaviestAxleWeightCharacteristic" type="D2LogicalModel:HeaviestAxleWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
<xs:element name="numberOfAxlesCharacteristic" type="D2LogicalModel:NumberOfAxlesCharacteristic" minOccurs="0"
maxOccurs="2" />
<xs:element name="vehicleCharacteristicsExtension" type="D2LogicalModel:_VehicleCharacteristicsExtensionType"
minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCharacteristicsExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel
types, load types etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="emissionClassification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>The valid list of entries for this attribute has to be specified between the communication-partners. Usually
it's some country specific classification code for emissions, which must be scored by vehicles to be valid.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="operationFreeOfEmission" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only vehicles that do not produce emissions (e.g. electric driven). Hybrid driven cars are allowed, when
they switch to emission free mode within the considered situation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType2" type="D2LogicalModel:LoadType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Loads currently not supported in 'LoadTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType2" type="D2LogicalModel:VehicleType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Vehicle types currently not supported in 'VehicleTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fuelType2" type="D2LogicalModel:FuelType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Fuel types currently not supported in 'FuelTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleUsage2" type="D2LogicalModel:VehicleUsage2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Usage types currently not supported in 'VehicleUsageTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="VehicleEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle equipment in use or on board.</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="notUsingSnowChains">
    <xs:annotation>
      <xs:documentation>Vehicle not using snow chains.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="notUsingSnowChainsOrTyres">
    <xs:annotation>
      <xs:documentation>Vehicle not using either snow tyres or snow chains.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="snowChainsInUse">
    <xs:annotation>
      <xs:documentation>Vehicle using snow chains.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="snowTyresInUse">
    <xs:annotation>
      <xs:documentation>Vehicle using snow tyres.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="snowChainsOrTyresInUse">
    <xs:annotation>
      <xs:documentation>Vehicle using snow tyres or snow chains.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="withoutSnowTyresOrChainsOnBoard">
    <xs:annotation>
      <xs:documentation>Vehicle which is not carrying on board snow tyres or chains.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abandoned">
      <xs:annotation>
        <xs:documentation>Abandoned vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="brokenDown">
      <xs:annotation>
        <xs:documentation>Broken down vehicle (i.e. it is immobile due to mechanical breakdown).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="burntOut">
      <xs:annotation>
        <xs:documentation>Burnt out vehicle, but fire is extinguished.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="damaged">
      <xs:annotation>
        <xs:documentation>Vehicle is damaged following an incident or collision. It may or may not be able to move by
        itself.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="damagedAndImmobilized">
  <xs:annotation>
    <xs:documentation>Vehicle is damaged following an incident or collision. It is immobilized and therefore needs assistance to be
moved.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onFire">
  <xs:annotation>
    <xs:documentation>Vehicle is on fire.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleType2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle types which are currently not supported in vehicleType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorhome">
      <xs:annotation>
        <xs:documentation>Motorhome</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Light goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="minibus">
      <xs:annotation>
        <xs:documentation>Minibus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="smallCar">
      <xs:annotation>
        <xs:documentation>Small car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="largeCar">
      <xs:annotation>
        <xs:documentation>Large car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicleWithTrailer">
      <xs:annotation>
        <xs:documentation>Light goods vehicle with trailer</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicleWithTrailer">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle with trailer</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="heavyHaulageVehicle">
  <xs:annotation>
    <xs:documentation>Heavy-haulage vehicle</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="passengerCar">
  <xs:annotation>
    <xs:documentation>Passenger car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anyVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle of any type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="articulatedVehicle">
      <xs:annotation>
        <xs:documentation>Articulated vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>Bicycle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bus">
      <xs:annotation>
        <xs:documentation>Bus.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="car">
      <xs:annotation>
        <xs:documentation>Car.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="caravan">
      <xs:annotation>
        <xs:documentation>Caravan.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carOrLightVehicle">
      <xs:annotation>

```

```

    <xs:documentation>Car or light vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithCaravan">
  <xs:annotation>
    <xs:documentation>Car towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithTrailer">
  <xs:annotation>
    <xs:documentation>Car towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="constructionOrMaintenanceVehicle">
  <xs:annotation>
    <xs:documentation>Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry
mounted crane etc.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fourWheelDrive">
  <xs:annotation>
    <xs:documentation>Four wheel drive vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="highSidedVehicle">
  <xs:annotation>
    <xs:documentation>High sided vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lorry">
  <xs:annotation>
    <xs:documentation>Lorry of any type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="moped">
  <xs:annotation>
    <xs:documentation>Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by
normally having pedals).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycle">
  <xs:annotation>
    <xs:documentation>Motorcycle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycleWithSideCar">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle comprising a motorcycle with an attached side car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorscooter">
  <xs:annotation>
    <xs:documentation>Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter
wheels).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tanker">
  <xs:annotation>
    <xs:documentation>Vehicle with large tank for carrying bulk liquids.</xs:documentation>

```

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="threeWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="trailer">
  <xs:annotation>
    <xs:documentation>Trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tram">
  <xs:annotation>
    <xs:documentation>Tram.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="twoWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Two wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="van">
  <xs:annotation>
    <xs:documentation>Van.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle with catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithoutCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle without catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCaravan">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withEvenNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with even numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withOddNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with odd numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
```

```

    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsage2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle usage types which are currently not supported in vehicleUsageType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="cityLogistics">
      <xs:annotation>
        <xs:documentation>Vehicles that are used to deliver goods in a city area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carSharing">
      <xs:annotation>
        <xs:documentation>Vehicles operated by a car-sharing company.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleUsageEnum">
  <xs:annotation>
    <xs:documentation>Types of usage of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agricultural">
      <xs:annotation>
        <xs:documentation>Vehicle used for agricultural purposes.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="commercial">
      <xs:annotation>
        <xs:documentation>Vehicle which is limited to non-private usage or public transport usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="emergencyServices">
      <xs:annotation>
        <xs:documentation>Vehicle used by the emergency services.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="military">
      <xs:annotation>
        <xs:documentation>Vehicle used by the military.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nonCommercial">
      <xs:annotation>
        <xs:documentation>Vehicle used for non-commercial or private purposes.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="patrol">
      <xs:annotation>
        <xs:documentation>Vehicle used as part of a patrol service, e.g. road operator or automobile association patrol
vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="recoveryServices">

```

```

<xs:annotation>
  <xs:documentation>Vehicle used to provide a recovery service.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadMaintenanceOrConstruction">
  <xs:annotation>
    <xs:documentation>Vehicle used for road maintenance or construction work purposes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadOperator">
  <xs:annotation>
    <xs:documentation>Vehicle used by the road operator.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxi">
  <xs:annotation>
    <xs:documentation>Vehicle used to provide an authorised taxi service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VersionedReference">
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="WeekOfMonthEnum">
  <xs:annotation>
    <xs:documentation>Weeks of the month.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeekOfMonth">
      <xs:annotation>
        <xs:documentation>First week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="secondWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Second week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thirdWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Third week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fourthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fourth week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fifthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fifth week of the month (at most only 3 days and non in February when not a leap year).
      </xs:documentation>
    </xs:annotation>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="WidthCharacteristic">

```



```
<xs:annotation>
  <xs:documentation>Width characteristic of a vehicle.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="vehicleWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The maximum width of an individual vehicle, in metres.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="widthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
</xs:schema>
```

DRAFT

## Annex I (normative)

### Referenced XML Schema for the DATEX II Truck Parking profile

#### I.1 Overview

This Annex shall be used when using an XML encoding.

As specified in Part 1 this schema already uses Extensions and further on may be extended by use of Extensions. Such extensions shall be done in a manner conformant to the requirements specified in Part 1 - Clause 9 and Annex D.

Supplied data claiming conformance to this Part and specifically this Annex shall positively validate against the schema specified in this Annex including any permissible Level B Extensions.

The schemata provided in this annex are part of the DATEX II Truck Parking profile as specified in normative Annex A.

#### I.2 Schema for Parking Table Publication (DATEX II Truck Parking profile)

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:D2LogicalModel="http://datex2.eu/schema/2/2_0" version="2.3" targetNamespace="http://datex2.eu/schema/2/2_0"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="_AreaExtensionType">
    <xs:sequence>
      <xs:element name="areaExtended" type="D2LogicalModel:AreaExtended" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_ChargeBandVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="ChargeBand" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ContactDetailsVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="ContactDetails" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ExtensionType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_GenericPublicationExtensionType">
    <xs:sequence>
      <xs:element name="parkingTablePublication" type="D2LogicalModel:ParkingTablePublication" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
</xs:schema>
```

```

</xs:complexType>
<xs:complexType name="_GroupOfParkingSpaces">
  <xs:sequence>
    <xs:element name="parkingSpaceBasics" type="D2LogicalModel:ParkingSpaceBasics" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="groupIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_GroupOfParkingSpacesParkingSpaceIndexParkingSpace">
  <xs:sequence>
    <xs:element name="parkingSpace" type="D2LogicalModel:ParkingSpace" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_IntermediatePointOnLinearElement">
  <xs:sequence>
    <xs:element name="referent" type="D2LogicalModel:Referent" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="index" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_LocationContainedInItinerary">
  <xs:sequence>
    <xs:element name="location" type="D2LogicalModel:Location" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="index" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingAccessReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Reference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingAccess" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingRecordEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility">
  <xs:sequence>
    <xs:element name="parkingEquipmentOrServiceFacility" type="D2LogicalModel:ParkingEquipmentOrServiceFacility"
minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="equipmentOrServiceFacilityIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingRecordVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRecord" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingRouteDetailsVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRouteDetails" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingSiteScenarioIndexParkingUsageScenario">
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenario" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="scenarioIndex" type="xs:int" use="required" />
</xs:complexType>

```

```

<xs:complexType name="_ParkingSpace">
  <xs:sequence>
    <xs:element name="parkingSpaceBasics" type="D2LogicalModel:ParkingSpaceBasics" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingSpaceBasicsEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility">
  <xs:sequence>
    <xs:element name="parkingEquipmentOrServiceFacility" type="D2LogicalModel:ParkingEquipmentOrServiceFacility"
minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="equipmentOrServiceFacilityIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingSpaceBasicsScenarioIndexParkingUsageScenario">
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenario" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="scenarioIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_PeriodExtensionType">
  <xs:sequence>
    <xs:element name="periodExtended" type="D2LogicalModel:PeriodExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_PointExtensionType">
  <xs:sequence>
    <xs:element name="pointExtended" type="D2LogicalModel:PointExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_PolygonAreaIndexPointCoordinates">
  <xs:sequence>
    <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" minOccurs="1" maxOccurs="1" />
  </xs:sequence>
  <xs:attribute name="index" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_PredefinedItineraryVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedItinerary" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PredefinedLocationVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedLocation" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PredefinedNonOrderedLocationGroupVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="PredefinedNonOrderedLocationGroup" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_VehicleCharacteristicsExtensionType">

```

```

<xs:sequence>
  <xs:element name="vehicleCharacteristicsExtended" type="D2LogicalModel:VehicleCharacteristicsExtended" minOccurs="0" />
  <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="_VmsUnitRecordVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="VmsUnitRecord" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AcceptedPaymentCards">
  <xs:annotation>
    <xs:documentation>Use this class to describe details in case acceptedMeansOfPayment is set to
'paymentCard'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="paymentCards" type="D2LogicalModel:PaymentCardTypesEnum" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>List of accepted payment cards.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="otherPaymentCards" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Further accepted payment cards.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="paymentCardBrands" type="D2LogicalModel:PaymentCardBrandsEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>List of accepted brands for payment cards.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="otherPaymentCardBrands" type="D2LogicalModel:String" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Further accepted brands of payment cards.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="acceptedPaymentCardsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AccessCategoryEnum">
  <xs:annotation>
    <xs:documentation>Specifies the category of the access.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="vehicleEntranceAndExit">
      <xs:annotation>
        <xs:documentation>An entrance and exit for vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="vehicleEntrance">
      <xs:annotation>
        <xs:documentation>An entrance for vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="vehicleExit">
      <xs:annotation>

```

```

    <xs:documentation>An exit for vehicles.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianEntranceAndExit">
  <xs:annotation>
    <xs:documentation>An entrance and exit for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianEntrance">
  <xs:annotation>
    <xs:documentation>An entrance for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pedestrianExit">
  <xs:annotation>
    <xs:documentation>An exit for pedestrian.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="emergencyExit">
  <xs:annotation>
    <xs:documentation>An exit that can be used by pedestrians in case of emergency (i.e. among others easy to access and
signed).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>The category of this access is not specified any further.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AccessEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Specifies additional equipment for this access.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="barrier">
      <xs:annotation>
        <xs:documentation>There is a barrier on this entrance or exit. Usually access is granted through tickets, buttons or electronic
systems.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="trafficSignal">
      <xs:annotation>
        <xs:documentation>There is a traffic signal installation controlling this access.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ticketButtonMachine">
      <xs:annotation>

```

```

    <xs:documentation>A machine at this entrance provides a parking ticket by pressing a button.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ticketCardMachine">
  <xs:annotation>
    <xs:documentation>A machine at this entrance provides a parking ticket by inserting some payment or identity
card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payAndExitMachine">
  <xs:annotation>
    <xs:documentation>A machine at this exit enables payment directly by inserting a payment or identity card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AccessibilityEnum">
  <xs:annotation>
    <xs:documentation>Special forms of accessibility, easements and marking for handicapped people.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="barrierFreeAccessible">
      <xs:annotation>
        <xs:documentation>Accessible without any steps or other barriers. This is not as strong as
handicappedAccessible.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
    <xs:enumeration value="handicappedAccessible">
      <xs:annotation>
        <xs:documentation>Accessible for handicapped people. Wheelchair accessible is a special form of it.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
    <xs:enumeration value="wheelChairAccessible">
      <xs:annotation>
        <xs:documentation>Accessible by people in a wheelchair.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
    <xs:enumeration value="handicappedEasements">
      <xs:annotation>
        <xs:documentation>There are special easements for handicapped people, like handrails or handicapped-friendly
furniture.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
    <xs:enumeration value="orientationSystemForBlindPeople">
      <xs:annotation>
        <xs:documentation>There is some orientation system, which helps blind or visually impaired people. Examples might be some
acoustic system or tactile paving.</xs:documentation>
      </xs:annotation>
</xs:enumeration>
    <xs:enumeration value="handicappedMarked">
      <xs:annotation>
        <xs:documentation>There is a visible mark for the privilege of handicapped or disabled people (e.g. a wheelchair
symbol).</xs:documentation>
      </xs:annotation>

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</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>No form of special accessibility, i.e. usually not convenient for handicapped people, e.g. because of steps
or barriers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>It is unknown, whether there is a special form of accessibility.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="AffectedCarriagewayAndLanes">
  <xs:annotation>
    <xs:documentation>Supplementary positional information which details carriageway and lane locations. Several instances may
exist where the element being described extends over more than one carriageway.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="carriageway" type="D2LogicalModel:CarriagewayEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates the section of carriageway to which the location relates.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lane" type="D2LogicalModel:LaneEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Indicates the specific lane to which the location relates.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="footpath" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates whether the pedestrian footpath is the subject or part of the subject of the location. (True =
footpath is subject)</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lengthAffected" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This indicates the length of road measured in metres affected by the associated traffic
element.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="affectedCarriagewayAndLanesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCArea">
  <xs:annotation>
    <xs:documentation>An area defined by reference to a predefined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```



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</xs:element>
<xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location
table number.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="areaLocation" type="D2LogicalModel:AlertCLocation">
  <xs:annotation>
    <xs:documentation>Area location defined by a specific Alert-C location.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="alertCAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCDirection">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow along the road to which the information relates.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCDirectionCoded" type="D2LogicalModel:AlertCDirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow to which the situation, traffic data or information is related. Positive is in the
direction of coding of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionNamed" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ALERT-C name of a direction e.g. Brussels -&gt; Lille.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionSense" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicates for circular routes (i.e. valid only for ring roads) the sense in which navigation should be made
from the primary location to the secondary location, to avoid ambiguity. TRUE indicates positive RDS direction, i.e. direction of coding
of road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCDirectionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AlertCDirectionEnum">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive (resp. negative)
direction corresponds to the positive offset direction within the RDS location table.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="both">
      <xs:annotation>
        <xs:documentation>Indicates that both directions of traffic flow are affected by the situation or relate to the traffic
data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="negative">

```

```

<xs:annotation>
  <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the negative direction
  corresponds to the negative offset direction within the RDS location table.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="positive">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive direction
    corresponds to the positive offset direction within the RDS location table.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="AlertCLinear" abstract="true">
  <xs:annotation>
    <xs:documentation>A linear section along a road defined between two points on the road by reference to a pre-defined ALERT-C
    location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location
        table number.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCLinearByCode">
  <xs:annotation>
    <xs:documentation>A linear section along a road defined by reference to a linear section in a pre-defined ALERT-C location
    table.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="locationCodeForLinearLocation" type="D2LogicalModel:AlertCLocation">
          <xs:annotation>
            <xs:documentation>Linear location defined by a specific Alert-C location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="alertCLinearByCodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCLocation">
  <xs:annotation>
    <xs:documentation>Identification of a specific point, linear or area location in an ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of ALERT-C location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specificLocation" type="D2LogicalModel:AlertCLocationCode" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique code within the ALERT-C location table which identifies the specific point, linear or area
location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AlertCLocationCode">
  <xs:annotation>
    <xs:documentation>A positive integer number (between 1 and 63,487) which uniquely identifies a pre-defined Alert C location
defined within an Alert-C table.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="AlertCMethod2Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a road between two points, Primary and Secondary, which are pre-defined in an
ALERT-C location table. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the
Secondary point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod2PrimaryPointLocation" type="D2LogicalModel:AlertCMethod2PrimaryPointLocation" />
        <xs:element name="alertCMethod2SecondaryPointLocation" type="D2LogicalModel:AlertCMethod2SecondaryPointLocation" />
        <xs:element name="alertCMethod2LinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod2Point">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table
and which has an associated direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCPoint">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod2PrimaryPointLocation" type="D2LogicalModel:AlertCMethod2PrimaryPointLocation" />
        <xs:element name="alertCMethod2PointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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```

</xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod2PrimaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Primary point) which is either a single point or at the downstream end of a linear road
    section. The point is specified by a reference to a point in a pre-defined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="alertCMethod2PrimaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod2SecondaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified
    by a reference to a point in a pre-defined ALERT-C location table.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="alertCMethod2SecondaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod4Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a road between two points, Primary and Secondary, which are pre-defined ALERT-C
    locations plus offset distance. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the
    Secondary point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCLinear">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod4PrimaryPointLocation" type="D2LogicalModel:AlertCMethod4PrimaryPointLocation" />
        <xs:element name="alertCMethod4SecondaryPointLocation" type="D2LogicalModel:AlertCMethod4SecondaryPointLocation" />
        <xs:element name="alertCMethod4LinearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod4Point">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table
    plus an offset distance and which has an associated direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCPoint">
      <xs:sequence>
        <xs:element name="alertCDirection" type="D2LogicalModel:AlertCDirection" />
        <xs:element name="alertCMethod4PrimaryPointLocation" type="D2LogicalModel:AlertCMethod4PrimaryPointLocation" />
        <xs:element name="alertCMethod4PointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AlertCMethod4PrimaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Primary point) which is either a single point or at the downstream end of a linear road
    section. The point is specified by a reference to a point in a pre-defined ALERT-C location table plus a non-negative offset
    distance.</xs:documentation>
  </xs:annotation>

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</xs:annotation>
<xs:sequence>
  <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
  <xs:element name="offsetDistance" type="D2LogicalModel:OffsetDistance" />
  <xs:element name="alertCMethod4PrimaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCMethod4SecondaryPointLocation">
  <xs:annotation>
    <xs:documentation>The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified by a reference to a point in a pre-defined Alert-C location table plus a non-negative offset distance.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocation" type="D2LogicalModel:AlertCLocation" />
    <xs:element name="offsetDistance" type="D2LogicalModel:OffsetDistance" />
    <xs:element name="alertCMethod4SecondaryPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="AlertCPoint" abstract="true">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by reference to a pre-defined ALERT-C location table and which has an associated direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>EBU country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableNumber" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location table number.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCLocationTableVersion" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Version number associated with an ALERT-C table reference.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="alertCPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AmountOfMoney">
  <xs:annotation>
    <xs:documentation>A monetary value expressed to two decimal places.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Decimal">
    <xs:totalDigits value="8" />
    <xs:fractionDigits value="2" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Ampere">
  <xs:annotation>
    <xs:documentation>Ampere.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="Area">

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<xs:annotation>
  <xs:documentation>A geographic or geometric defined area which may be qualified by height information to provide additional
  geospatial discrimination (e.g. for snow in an area but only above a certain altitude).</xs:documentation>
</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:Location">
    <xs:sequence>
      <xs:element name="alertCArea" type="D2LogicalModel:AlertCArea" minOccurs="0" />
      <xs:element name="tpegAreaLocation" type="D2LogicalModel:TpegAreaLocation" minOccurs="0" />
      <xs:element name="areaExtension" type="D2LogicalModel:_AreaExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="AreaDestination">
  <xs:annotation>
    <xs:documentation>The specification of the destination of a defined route or itinerary which is an area.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Destination">
      <xs:sequence>
        <xs:element name="area" type="D2LogicalModel:Area" />
        <xs:element name="areaDestinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="AreaExtended">
  <xs:annotation>
    <xs:documentation>Extension class for area used in parking publication extension.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="namedArea" type="D2LogicalModel:NamedArea" minOccurs="0" />
    <xs:element name="polygonArea" type="D2LogicalModel:PolygonArea" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AreaOfInterestEnum">
  <xs:annotation>
    <xs:documentation>Types of areas of interest.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="continentWide">
      <xs:annotation>
        <xs:documentation>Area of the whole European continent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="national">
      <xs:annotation>
        <xs:documentation>Whole area of the specific country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="neighbouringCountries">
      <xs:annotation>
        <xs:documentation>Area of countries which are neighbouring the one specified.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notSpecified">
      <xs:annotation>
        <xs:documentation>Non specified area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="regional">
  <xs:annotation>
    <xs:documentation>Area of the local region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="AvailabilityEnum">
  <xs:annotation>
    <xs:documentation>An enumeration which states if something is available or not.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="available">
      <xs:annotation>
        <xs:documentation>The element in question is available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notAvailable">
      <xs:annotation>
        <xs:documentation>The element in question is not available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>There is no information about whether the element in question is available or not.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Boolean">
  <xs:annotation>
    <xs:documentation>Boolean has the value space required to support the mathematical concept of binary-valued logic: {true, false}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:boolean" />
</xs:simpleType>
<xs:simpleType name="CarriagewayEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors identifying specific carriageway details.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="connectingCarriageway">
      <xs:annotation>
        <xs:documentation>On the connecting carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="entrySlipRoad">
      <xs:annotation>
        <xs:documentation>On the entry slip road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="exitSlipRoad">
      <xs:annotation>
        <xs:documentation>On the exit slip road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="flyover">

```

```
<xs:annotation>
  <xs:documentation>On the flyover, i.e. the section of road passing over another.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandFeederRoad">
  <xs:annotation>
    <xs:documentation>On the left hand feeder road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandParallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the left hand parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mainCarriageway">
  <xs:annotation>
    <xs:documentation>On the main carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="oppositeCarriageway">
  <xs:annotation>
    <xs:documentation>On the opposite carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the adjacent parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandFeederRoad">
  <xs:annotation>
    <xs:documentation>On the right hand feeder road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandParallelCarriageway">
  <xs:annotation>
    <xs:documentation>On the right hand parallel carriageway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roundabout">
  <xs:annotation>
    <xs:documentation>On the roundabout.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="serviceRoad">
  <xs:annotation>
    <xs:documentation>On the adjacent service road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="slipRoads">
  <xs:annotation>
    <xs:documentation>On the slip roads.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="underpass">
  <xs:annotation>
    <xs:documentation>On the underpass, i.e. the section of road passing under another.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

</xs:restriction>
</xs:simpleType>
<xs:complexType name="Charge">
  <xs:annotation>
    <xs:documentation>A particular charge for a specified interval belonging a charge band.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="charge" type="D2LogicalModel:AmountOfMoney" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Charge for the specified interval (for vehicle of defined characteristics, if any specified) up to the maximum
        defined duration and during the defined period(s).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeInterval" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Interval for which the charge applies (e.g. charge applies for 2 hours (to specify in seconds)). If no interval
        is specified, the price is valid for the whole period (kind of flat fee).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeType" type="D2LogicalModel:ChargeTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of charge. Day- week- month- and year-charges can be specified without this enumeration by
        specifying the interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeTypeDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Additional description for this kind of charge type, especially if the enumeration does not
        fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="maxIterationsOfCharge" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This charge must not be applied more often within this charge band than specified in this attribute. Thus it is
        possible to specify the first hour for free, for example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="minIterationsOfCharge" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This charge must be applied within this charge band at least as often as specified in this attribute. Thus it is
        possible to specify the first hour in an expensive manner, for example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeOrderIndex" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A non-unique index which forms an order for applying charges, i.e. a charge may never be applied
        afterwards a charge with a higher index. For some indices there is no order-restriction. You can skip charges unless their
        'minIterationsOfCharge' is not > 0.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="timePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The TimePeriodOfDay limits the validity of the charge to this period (e.g. night-tariffs).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ChargeBand">

```

```

<xs:annotation>
  <xs:documentation>A charge band in accordance with the specified conditions, possibly up to a maximum duration, during a
  specified period and for a vehicle of specified characteristics (in case of parking).</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="chargeCurrency" type="D2LogicalModel:CurrencyEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>A three-character code according to ISO 4217 for the currency in which the parking charge is specified (e.g.
      EUR, GBP, SEK, CZK).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="maximumDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The maximum duration (e.g. of parking) for which the specified charge is applicable.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="chargeBandName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name for this charge band.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Limitation to a set of special users.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="charge" type="D2LogicalModel:Charge" maxOccurs="unbounded" />
  <xs:element name="applicableForPeriod" type="D2LogicalModel:OverallPeriod" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Charge band limitation on a (complex) period, described by the validity model.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="applicableForVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
  maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Charge band limitation on a set of vehicles described by their characteristics.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingPermit" type="D2LogicalModel:ParkingPermit" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="chargeBandExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ChargeBandByReference">
  <xs:annotation>
    <xs:documentation>Using (a) prior defined charge band(s), identified by its reference.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chargeBandReference" type="D2LogicalModel:_ChargeBandVersionedReference" minOccurs="1"
    maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a charge band.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargeBandByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ChargeTypeEnum">

```

```

<xs:annotation>
  <xs:documentation>Charge type</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="minimum">
    <xs:annotation>
      <xs:documentation>Minimum price for the given interval.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="maximum">
    <xs:annotation>
      <xs:documentation>Maximum price for the given interval.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="additionalIntervalPrice">
    <xs:annotation>
      <xs:documentation>Price for all intervals following the first interval.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="seasonTicket">
    <xs:annotation>
      <xs:documentation>Season ticket.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="temporaryPrice">
    <xs:annotation>
      <xs:documentation>Temporary price.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="firstIntervalPrice">
    <xs:annotation>
      <xs:documentation>Price for the first interval, e.g. the first hour. See also 'additional'.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="freeParking">
    <xs:annotation>
      <xs:documentation>Free Parking. Set charge to 0.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="flat">
    <xs:annotation>
      <xs:documentation>Flat fee.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ChargingStationUsageTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of usage for electric charging station(s).</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="electricVehicle">
    <xs:annotation>
      <xs:documentation>Charging of electric vehicles.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="motorhomeOrCaravanSupply">
    <xs:annotation>
      <xs:documentation>Supply for motorhomes or caravans.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="electricBikeOrMotorcycle">
    <xs:annotation>
      <xs:documentation>Charging of E-Bikes or E-Motorcycles.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="lorryPowerConsumption">
    <xs:annotation>
      <xs:documentation>Supply for lorries with power consumption, e.g. for refrigerated goods transports.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="electricalDevices">
    <xs:annotation>
      <xs:documentation>Provides a plug for electrical devices (e.g. shaver, mobile phones, hair dryer, ...)</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other usage for the electric charging stations.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ComparisonOperatorEnum">
  <xs:annotation>
    <xs:documentation>Logical comparison operations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="equalTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThanOrEqualTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than or equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "less than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="lessThanOrEqualTo">
  <xs:annotation>
    <xs:documentation>Logical comparison operator of "less than or equal to".</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ConfidentialityValueEnum">
  <xs:annotation>
    <xs:documentation>Values of confidentiality.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="internalUse">
      <xs:annotation>
        <xs:documentation>For internal use only of the recipient organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noRestriction">
      <xs:annotation>
        <xs:documentation>No restriction on usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthorities">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesAndTrafficOperators">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities and traffic operators.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndPublishers">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators and publishers (service
providers).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndVms">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators, publishers (service providers) and variable message
signs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="Contact">
  <xs:annotation>
    <xs:documentation>Address and contact information about some person, service or the parking site, provided in detail or via
reference.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="contactUnknown" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the contact for the selected role and/or timeframe is unknown. Don't use the specialisations in
this case.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="contactNotDefined" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">

```

```

<xs:annotation>
  <xs:documentation>When true, there is currently no contact defined for the selected role and/or timeframe. Don't use the
specialisations in this case.</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="validityOfContact" type="D2LogicalModel:OverallPeriod" minOccurs="0" />
<xs:element name="contactExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ContactByReference">
  <xs:annotation>
    <xs:documentation>Contact information that is addressed via a reference.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Contact">
      <xs:sequence>
        <xs:element name="contactReference" type="D2LogicalModel:_ContactDetailsVersionedReference" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Contact information provided by a reference.</xs:documentation>
          </xs:annotation>
          </xs:element>
          <xs:element name="contactByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="ContactDetails">
    <xs:annotation>
      <xs:documentation>Details for some person, service or the parking site itself, especially address information.</xs:documentation>
    </xs:annotation>
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:Contact">
        <xs:sequence>
          <xs:element name="contactOrganisationName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>Name of the organisation or service. Do not use this attribute in combination with role
"parkingSiteAddress".</xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="contactPersonName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>Name of the contact person.</xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="contactPersonFirstName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>First name of the contact person.</xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="contactPersonPosition" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
            <xs:annotation>
              <xs:documentation>The position of the contact person.</xs:documentation>
            </xs:annotation>
          </xs:element>
          <xs:element name="contactDetailsLanguage" type="D2LogicalModel:Language" minOccurs="0" maxOccurs="unbounded">
            <xs:annotation>
              <xs:documentation>Language(s) this contact is able to speak resp. understand.</xs:documentation>
            </xs:annotation>
          </xs:element>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>

```

```

</xs:element>
<xs:element name="contactDetailsAddress" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Complete address of the contact. Alternatively use the separate fields to describe the
address.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsStreet" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Street of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsHouseNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="2">
  <xs:annotation>
    <xs:documentation>House number of the contact. Supports a multiplicity up to two, to specify lower and upper
numbers.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsPostcode" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Postcode of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsCity" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>City of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsTelephoneNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Telephone Number of contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsFax" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Fax of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsEMail" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>E-Mail address of the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
further relevant information may be obtained.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsLogoUri" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Url to define a logo of this contact.</xs:documentation>
  </xs:annotation>
</xs:element>

```

```

<xs:element name="available24hours" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies if the availability is 24 hours a day. If omitted, this information is unknown or
heterogeneous.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsResponsibility" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Specification of what service or equipment the contact is responsible for.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsMoreInfo" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Additional information relating to the contact.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publishingAgreement" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Indication, whether the contact accepted publishing its contact information.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="contactDetailsOwnership" type="D2LogicalModel:OwnershipTypeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Information if the contact in question is a private or public institution.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
<xs:element name="contactDetailsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="CountryEnum">
  <xs:annotation>
    <xs:documentation>List of countries.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="at">
      <xs:annotation>
        <xs:documentation>Austria</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="be">
      <xs:annotation>
        <xs:documentation>Belgium</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bg">
      <xs:annotation>
        <xs:documentation>Bulgaria</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ch">
      <xs:annotation>
        <xs:documentation>Switzerland</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```



```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="cs">
  <xs:annotation>
    <xs:documentation>Serbia and Montenegro</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cy">
  <xs:annotation>
    <xs:documentation>Cyprus</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cz">
  <xs:annotation>
    <xs:documentation>Czech Republic</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="de">
  <xs:annotation>
    <xs:documentation>Germany</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dk">
  <xs:annotation>
    <xs:documentation>Denmark</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ee">
  <xs:annotation>
    <xs:documentation>Estonia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="es">
  <xs:annotation>
    <xs:documentation>Spain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fi">
  <xs:annotation>
    <xs:documentation>Finland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fo">
  <xs:annotation>
    <xs:documentation>Faroe Islands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fr">
  <xs:annotation>
    <xs:documentation>France</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gb">
  <xs:annotation>
    <xs:documentation>Great Britain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gg">
  <xs:annotation>

```

```
<xs:documentation>Guernsey</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="gi">
  <xs:annotation>
    <xs:documentation>Gibraltar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gr">
  <xs:annotation>
    <xs:documentation>Greece</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hr">
  <xs:annotation>
    <xs:documentation>Croatia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hu">
  <xs:annotation>
    <xs:documentation>Hungary</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ie">
  <xs:annotation>
    <xs:documentation>Ireland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="im">
  <xs:annotation>
    <xs:documentation>Isle Of Man</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="is">
  <xs:annotation>
    <xs:documentation>Iceland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="it">
  <xs:annotation>
    <xs:documentation>Italy</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="je">
  <xs:annotation>
    <xs:documentation>Jersey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="li">
  <xs:annotation>
    <xs:documentation>Lichtenstein</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lt">
  <xs:annotation>
    <xs:documentation>Lithuania</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lu">
```

```
<xs:annotation>
  <xs:documentation>Luxembourg</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="lv">
  <xs:annotation>
    <xs:documentation>Latvia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ma">
  <xs:annotation>
    <xs:documentation>Morocco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mc">
  <xs:annotation>
    <xs:documentation>Monaco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mk">
  <xs:annotation>
    <xs:documentation>Macedonia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mt">
  <xs:annotation>
    <xs:documentation>Malta</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nl">
  <xs:annotation>
    <xs:documentation>Netherlands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="no">
  <xs:annotation>
    <xs:documentation>Norway</xs:documentation>
  </xs:annotation>
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<xs:enumeration value="pl">
  <xs:annotation>
    <xs:documentation>Poland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pt">
  <xs:annotation>
    <xs:documentation>Portugal</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ro">
  <xs:annotation>
    <xs:documentation>Romania</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="se">
  <xs:annotation>
    <xs:documentation>Sweden</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

<xs:enumeration value="si">
  <xs:annotation>
    <xs:documentation>Slovenia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sk">
  <xs:annotation>
    <xs:documentation>Slovakia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sm">
  <xs:annotation>
    <xs:documentation>San Marino</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tr">
  <xs:annotation>
    <xs:documentation>Turkey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="va">
  <xs:annotation>
    <xs:documentation>Vatican City State</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="CubicMetres">
  <xs:annotation>
    <xs:documentation>A volumetric measure defined in cubic metres.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="CurrencyEnum">
  <xs:annotation>
    <xs:documentation>Three letter code defining the currency according to ISO 4217 (e.g. EUR for Euro). This enumeration only
contains European currencies including the US dollar.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="eur">
      <xs:annotation>
        <xs:documentation>Euro</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="all">
      <xs:annotation>
        <xs:documentation>Lek (Albania)</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="amd">
      <xs:annotation>
        <xs:documentation>Armeniam Dram</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
<xs:enumeration value="azn">
  <xs:annotation>
    <xs:documentation>Azerbaijani Manat</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bam">
  <xs:annotation>
    <xs:documentation>Convertible Mark (Bosnia and Herzogovina)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bgn">
  <xs:annotation>
    <xs:documentation>Bulgarian Lev</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="byr">
  <xs:annotation>
    <xs:documentation>Belarussian Ruble</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="chf">
  <xs:annotation>
    <xs:documentation>Swiss Franc</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="czk">
  <xs:annotation>
    <xs:documentation>Czech Koruna</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dkk">
  <xs:annotation>
    <xs:documentation>Danish Krone</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gbp">
  <xs:annotation>
    <xs:documentation>Pound Sterling</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gel">
  <xs:annotation>
    <xs:documentation>Lari (Georgia)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hrk">
  <xs:annotation>
    <xs:documentation>Croatian Kuna</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="huf">
  <xs:annotation>
    <xs:documentation>Forint (Hungary)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="isk">
  <xs:annotation>
    <xs:documentation>Iceland Krona</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```
</xs:enumeration>
<xs:enumeration value="ltl">
  <xs:annotation>
    <xs:documentation>Litas (Lithuania)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mdl">
  <xs:annotation>
    <xs:documentation>Moldovan Leu</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mkd">
  <xs:annotation>
    <xs:documentation>Denar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nok">
  <xs:annotation>
    <xs:documentation>Norwegian Krone</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pln">
  <xs:annotation>
    <xs:documentation>Zloty</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ron">
  <xs:annotation>
    <xs:documentation>New Romanian Leu</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rsd">
  <xs:annotation>
    <xs:documentation>Serbian Dinar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rub">
  <xs:annotation>
    <xs:documentation>Russian Ruble</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sek">
  <xs:annotation>
    <xs:documentation>Swedish Krona</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="try">
  <xs:annotation>
    <xs:documentation>Turkish Lira</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="uah">
  <xs:annotation>
    <xs:documentation>Hryvnia (Ukraine)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="usd">
  <xs:annotation>
    <xs:documentation>US Dollar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Another currency.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:element name="d2LogicalModel" type="D2LogicalModel:D2LogicalModel">
  <xs:unique name="_d2LogicalModelParkingRouteDetailsConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingRouteDetails" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingTableConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingTable" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelContactDetailsConstraint">
    <xs:selector xpath="//D2LogicalModel:contactDetails" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingAccessConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingAccess" />
    <xs:field xpath="@id" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelParkingRecordConstraint">
    <xs:selector xpath="//D2LogicalModel:parkingRecord" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
  <xs:unique name="_d2LogicalModelChargeBandConstraint">
    <xs:selector xpath="//D2LogicalModel:chargeBand" />
    <xs:field xpath="@id" />
    <xs:field xpath="@version" />
  </xs:unique>
</xs:element>
<xs:complexType name="D2LogicalModel">
  <xs:annotation>
    <xs:documentation>The DATEX II logical model comprising exchange, content payload and management sub-
models.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="exchange" type="D2LogicalModel:Exchange" />
    <xs:element name="payloadPublication" type="D2LogicalModel:PayloadPublication" minOccurs="0" />
    <xs:element name="d2LogicalModelExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="modelBaseVersion" use="required" fixed="2" />
</xs:complexType>
<xs:simpleType name="DangerousGoodsRegulationsEnum">
  <xs:annotation>
    <xs:documentation>Types of dangerous goods regulations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="adr">
      <xs:annotation>

```

```
<xs:documentation>European agreement on the international carriage of dangerous goods on road.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="atalcao">
<xs:annotation>
<xs:documentation>Regulations covering the international transportation of dangerous goods issued by the International Air
Transport Association and the International Civil Aviation Organisation.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="imolmdg">
<xs:annotation>
<xs:documentation>Regulations regarding the transportation of dangerous goods on ocean-going vessels issued by the
International Maritime Organisation.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="railroadDangerousGoodsBook">
<xs:annotation>
<xs:documentation>International regulations concerning the international carriage of dangerous goods by
rail.</xs:documentation>
</xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Date">
<xs:annotation>
<xs:documentation>A combination of year, month and day integer-valued properties plus an optional timezone property. It
represents an interval of exactly one day, beginning on the first moment of the day in the timezone, i.e. '00:00:00' up to but not
including '24:00:00'.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:date" />
</xs:simpleType>
<xs:simpleType name="DateTime">
<xs:annotation>
<xs:documentation>A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property
and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from
UTC.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:dateTime" />
</xs:simpleType>
<xs:simpleType name="DayEnum">
<xs:annotation>
<xs:documentation>Days of the week.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:string">
<xs:enumeration value="monday">
<xs:annotation>
<xs:documentation>Monday.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="tuesday">
<xs:annotation>
<xs:documentation>Tuesday.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="wednesday">
<xs:annotation>
<xs:documentation>Wednesday.</xs:documentation>
</xs:annotation>
</xs:enumeration>
```



```

<xs:enumeration value="thursday">
  <xs:annotation>
    <xs:documentation>Thursday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="friday">
  <xs:annotation>
    <xs:documentation>Friday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="saturday">
  <xs:annotation>
    <xs:documentation>Saturday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sunday">
  <xs:annotation>
    <xs:documentation>Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DayWeekMonth">
  <xs:annotation>
    <xs:documentation>Specification of periods defined by the intersection of days, weeks and months.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableDay" type="D2LogicalModel:DayEnum" minOccurs="0" maxOccurs="7">
      <xs:annotation>
        <xs:documentation>Applicable day of the week. "All days of the week" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableWeek" type="D2LogicalModel:WeekOfMonthEnum" minOccurs="0" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableMonth" type="D2LogicalModel:MonthOfYearEnum" minOccurs="0" maxOccurs="12">
      <xs:annotation>
        <xs:documentation>Applicable month of the year. "All months of the year" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dayWeekMonthExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Decimal">
  <xs:annotation>
    <xs:documentation>A decimal number whose value space is the set of numbers that can be obtained by multiplying an integer by
a non-positive power of ten, i.e., expressible as  $i \times 10^{-n}$  where  $i$  and  $n$  are integers and  $n \geq 0$ .</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:decimal" />
</xs:simpleType>
<xs:complexType name="DedicatedAccess">
  <xs:annotation>
    <xs:documentation>Reference to an access of any type (vehicles, pedestrian, ...).</xs:documentation>
  </xs:annotation>

```

```

<xs:sequence>
  <xs:element name="dedicatedAccess" type="D2LogicalModel:_ParkingAccessReference" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further characteristics can be specified for those objects.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="distanceFromParkingSpace" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Distance from this access to the parking space or group of parking spaces. Especially interesting for handicapped people on the one hand or in case of the need of changing the side of a motorway.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="dedicatedAccessExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Destination" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification a destination. This may be either a point location or an area location.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="destinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Dimension">
  <xs:annotation>
    <xs:documentation>A component that provides dimension information. The product of width and height must not be necessarily be the square footage (e.g. in multi-storey buildings or when some zones are not part of the square footage).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="dimensionLength" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Length.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dimensionWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Width.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dimensionHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Height.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dimensionUsableArea" type="D2LogicalModel:SquareMetres" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The area measured in square metres, that is available for some specific purpose.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dimensionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="DirectionEnum">
  <xs:annotation>
    <xs:documentation>List of directions of travel.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">

```

```

<xs:enumeration value="allDirections">
  <xs:annotation>
    <xs:documentation>All directions (where more than two are applicable) at this point on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bothWays">
  <xs:annotation>
    <xs:documentation>Both directions that are applicable at this point on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="clockwise">
  <xs:annotation>
    <xs:documentation>Clockwise.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="anticlockwise">
  <xs:annotation>
    <xs:documentation>Anti-clockwise.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="innerRing">
  <xs:annotation>
    <xs:documentation>Inner ring direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="outerRing">
  <xs:annotation>
    <xs:documentation>Outer ring direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="northBound">
  <xs:annotation>
    <xs:documentation>North bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="northEastBound">
  <xs:annotation>
    <xs:documentation>North east bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eastBound">
  <xs:annotation>
    <xs:documentation>East bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="southEastBound">
  <xs:annotation>
    <xs:documentation>South east bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="southBound">
  <xs:annotation>
    <xs:documentation>South bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="southWestBound">
  <xs:annotation>
    <xs:documentation>South west bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

</xs:enumeration>
<xs:enumeration value="westBound">
  <xs:annotation>
    <xs:documentation>West bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="northWestBound">
  <xs:annotation>
    <xs:documentation>North west bound general direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inboundTowardsTown">
  <xs:annotation>
    <xs:documentation>Heading towards town centre direction of travel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="outboundFromTown">
  <xs:annotation>
    <xs:documentation>Heading out of or away from the town centre direction of travel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Direction is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="opposite">
  <xs:annotation>
    <xs:documentation>Opposite direction to the normal direction of flow at this point on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DistanceAlongLinearElement" abstract="true">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element either measured from the start node or a defined referent on that
linear element, where the start node is relative to the element definition rather than the direction of traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="distanceAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="DistanceFromLinearElementReferent">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from a "from referent" on the linear element, in the sense
relative to the linear element definition rather than the direction of traffic flow or optionally towards a "towards
referent".</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="distanceAlong" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measure of distance along a linear element.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:annotation>
  </xs:element>
  <xs:element name="fromReferent" type="D2LogicalModel:Referent">
    <xs:annotation>
      <xs:documentation>A known location along the linear element from which the distanceAlong is measured, termed the
"fromReferent" in ISO 19148. </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="towardsReferent" type="D2LogicalModel:Referent" minOccurs="0">
    <xs:annotation>
      <xs:documentation>A known location along the linear element towards which the distanceAlong is measured, termed the
"towardsReferent" in ISO 19148. </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="distanceFromLinearElementReferentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="DistanceFromLinearElementStart">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from the start node of the linear element, where start
node is relative to the element definition rather than the direction of traffic flow. </xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="distanceAlong" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measure of distance along a linear element. </xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="distanceFromLinearElementStartExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ElectricCharging">
  <xs:annotation>
    <xs:documentation>Additional information for the equipment 'electricChargingStation'. This component refers to the number of
charging stations specified in the attribute 'numberOfEquipmentOrServiceFacilities'. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chargingStationUsageType" type="D2LogicalModel:ChargingStationUsageTypeEnum" minOccurs="1"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Usage type of the electric charging station(s). </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="chargingStationModelType" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Model type of the electric charging station(s). Brand or company information can be specified in
'ParkingEquipmentOrServiceFacility'. For more than one type of model, use several instances of
'ParkingEquipmentOrServiceFacility'. </xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="maximumCurrent" type="D2LogicalModel:Ampere" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum current of the electric charging station(s) (in Ampere). </xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

</xs:annotation>
</xs:element>
<xs:element name="voltage" type="D2LogicalModel:Volt" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Available Voltage(s) of the electric charging station(s).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargingStationConnectorType" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Connector type(s) for the electric charging station(s).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="numberOfChargingPoints" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of vehicles or devices, which can be charged simultaneously (sum over all electric charging stations
specified with the 'numberOf...' attribute). If omitted, 1 charging point per station is assumed.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="electricChargingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Equipment">
  <xs:annotation>
    <xs:documentation>One type of equipment, that is available on the parking site.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingEquipmentOrServiceFacility">
      <xs:sequence>
        <xs:element name="equipmentType" type="D2LogicalModel:EquipmentTypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>One type of equipment, that is available on the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="electricCharging" type="D2LogicalModel:ElectricCharging" minOccurs="0" />
        <xs:element name="equipmentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="EquipmentTypeEnum">
  <xs:annotation>
    <xs:documentation>Equipment available on the parking or parking space or grouped parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="toilet">
      <xs:annotation>
        <xs:documentation>Indicates, whether there are toilets available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shower">
      <xs:annotation>
        <xs:documentation>Indicates, whether there are shower facilities available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="informationPoint">
      <xs:annotation>
        <xs:documentation>An information point with employees.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="informatonStele">
  <xs:annotation>
    <xs:documentation>An unmanned information point.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="internetTerminal">
  <xs:annotation>
    <xs:documentation>Public internet terminal. Charges may be specified using the TariffsAndPayment
section.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="internetWireless">
  <xs:annotation>
    <xs:documentation>Public wireless internet. Specifying an amount would be the number of hotspots/access points. Charges
may be specified using the TariffsAndPayment section.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payDesk">
  <xs:annotation>
    <xs:documentation>A possibility to pay for parking (with employees).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="paymentMachine">
  <xs:annotation>
    <xs:documentation>A parking ticket machine.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cashMachine">
  <xs:annotation>
    <xs:documentation>Cash machine.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vendingMachine">
  <xs:annotation>
    <xs:documentation>A vending machine for snacks, coffee etc. (without manpower).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="faxMachineOrService">
  <xs:annotation>
    <xs:documentation>A possibility to send and/or receive faxes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="copyMachineOrService">
  <xs:annotation>
    <xs:documentation>A possibility to create copies of documents.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="safeDeposit">
  <xs:annotation>
    <xs:documentation>A possibility to store valuable possession in a safe way. </xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="luggageLocker">
  <xs:annotation>
    <xs:documentation>Possibility to deposit luggage in a safe way.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicPhone">

```

```
<xs:annotation>
  <xs:documentation>Indicates, whether there's a public telephone available.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicCoinPhone">
  <xs:annotation>
    <xs:documentation>Indicates, whether there's a public telephone available that can be used with coins.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicCardPhone">
  <xs:annotation>
    <xs:documentation>Indicates, whether there's a public telephone available that can be used with a card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="elevator">
  <xs:annotation>
    <xs:documentation>Indication of the availability of elevators.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="picnicFacilities">
  <xs:annotation>
    <xs:documentation>Indication of whether any picnicking facilities, such as tables, chairs and shaded areas, are
available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dumpingStation">
  <xs:annotation>
    <xs:documentation>Possibility to get rid of sewerage (especially for motorhomes).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="freshWater">
  <xs:annotation>
    <xs:documentation>Possibility to get fresh water (e.g. for motorhomes) - toilets and showers etc. are not intended
here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="wasteDisposal">
  <xs:annotation>
    <xs:documentation>Possibility to get rid of waste in a legal way (e.g. for truckers or motorhomes). Normal refuse bins are not
intended here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuseBin">
  <xs:annotation>
    <xs:documentation>Refuse bins for small amounts of garbage (see also 'wasteDisposal').</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="iceFreeScaffold">
  <xs:annotation>
    <xs:documentation>A technical equipment to remove ice and snow from the roof of lorries.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="playground">
  <xs:annotation>
    <xs:documentation>A playground for children.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electricChargingStation">
  <xs:annotation>
```



<xs:documentation>For charging vehicles, motorhome supply etc. The 'numberOf...' attribute specifies the number of charging stations. You may specify the number of charging points and further information with component 'ElectricCharging'.</xs:documentation>

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="bikeParking">
  <xs:annotation>
    <xs:documentation>Bike parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tollTerminal">
  <xs:annotation>
    <xs:documentation>A terminal, where toll charges can be paid manually (this does not mean a toll gate on the
road)</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="defibrillator">
  <xs:annotation>
    <xs:documentation>Medical equipment to provide first aid after heart attacks.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="firstAidEquipment">
  <xs:annotation>
    <xs:documentation>Equipment to support first aid on injured people. Note that 'defibrillator' is a separate
literal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireHose">
  <xs:annotation>
    <xs:documentation>A hose for water transport in case of fire.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireExtinguisher">
  <xs:annotation>
    <xs:documentation>Fire extinguisher</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fireHydrant">
  <xs:annotation>
    <xs:documentation>Fire hydrant</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>None.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other equipment. Use 'otherEquipmentOrServiceFacility' to specify it.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>

```

```

<xs:complexType name="Exchange">
  <xs:annotation>
    <xs:documentation>Details associated with the management of the exchange between the supplier and the
client.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="keepAlive" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicator that this exchange is due to "keep alive" functionality.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="response" type="D2LogicalModel:ResponseEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the response that the supplier is returning to the requesting client.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="subscriptionReference" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique identifier of the client's subscription with the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="supplierIdentification" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="exchangeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ExternalReferencing">
  <xs:annotation>
    <xs:documentation>A location defined by reference to an external/other referencing system.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="externalLocationCode" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A code in the external referencing system which defines the location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="externalReferencingSystem" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the external/other location referencing system.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="externalReferencingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Float">
  <xs:annotation>
    <xs:documentation>A floating point number whose value space consists of the values  $m \times 2^e$ , where m is an integer whose
absolute value is less than  $2^{24}$ , and e is an integer between -149 and 104, inclusive.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:float" />
</xs:simpleType>
<xs:simpleType name="FuelTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of fuel used by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="battery">
      <xs:annotation>
        <xs:documentation>Battery.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="biodiesel">
  <xs:annotation>
    <xs:documentation>Biodiesel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="diesel">
  <xs:annotation>
    <xs:documentation>Diesel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dieselBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Diesel and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ethanol">
  <xs:annotation>
    <xs:documentation>Ethanol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hydrogen">
  <xs:annotation>
    <xs:documentation>Hydrogen.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquidGas">
  <xs:annotation>
    <xs:documentation>Liquid gas of any type including LPG.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lpg">
  <xs:annotation>
    <xs:documentation>Liquid petroleum gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="methane">
  <xs:annotation>
    <xs:documentation>Methane gas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Petrol and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GenericPublication">
  <xs:annotation>
    <xs:documentation>A publication used to make level B extensions at the publication level.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">

```

```

<xs:sequence>
  <xs:element name="genericPublicationName" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The name of the generic publication.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="genericPublicationExtension" type="D2LogicalModel:_GenericPublicationExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexType>
</xs:complexType>
<xs:complexType name="GrossWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Gross weight characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossVehicleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The gross weight of the vehicle and its load, including any trailers.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfLocations" abstract="true">
  <xs:annotation>
    <xs:documentation>One or more physically separate locations. Multiple locations may be related, as in an itinerary (or route), or may be unrelated. It is not for identifying the same physical location using different Location objects for different referencing systems.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="groupOfLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfParkingSites">
  <xs:annotation>
    <xs:documentation>A logical composition of parking sites with aggregated properties (e.g. number of spaces). Examples: Urban parking area "West" or all truck parkings along a motorway. The included parking sites may -but must not- be specified as subcomponents.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecord">
      <xs:sequence>
        <xs:element name="groupOfParkingSitesType" type="D2LogicalModel:GroupOfParkingSitesTypeEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of this group of parking sites.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteByReference" type="D2LogicalModel:_ParkingRecordVersionedReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Parking sites of this collection defined by reference.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:element>
<xs:element name="parkingSite" type="D2LogicalModel:ParkingSite" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="groupOfParkingSitesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="GroupOfParkingSitesTypeEnum">
  <xs:annotation>
    <xs:documentation>The type of this group of parking sites.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="truckParkingPriorityZone">
      <xs:annotation>
        <xs:documentation>This group is describing a truck parking priority zone according to the EU regulation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aggregationOfInformation">
      <xs:annotation>
        <xs:documentation>The main purpose of this group is to give summarized information of all encapsulated parking sites (e.g.
number of spaces in total).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="GroupOfParkingSpaces">
  <xs:annotation>
    <xs:documentation>A group of parking spaces. All information provided has to be identical for all places in this group. Can also be
used just to give the number of lorry parkings, for example. 'GroupOfParkingSpaces' may be multiple defined or include each
other.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSpaceBasics">
      <xs:sequence>
        <xs:element name="parkingNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Number of parking spaces (attribute is used for a parking record as well as for a group of parking
spaces).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingTypeOfGroup" type="D2LogicalModel:ParkingTypeOfGroup" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Defines the type of this group specification.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="identicalToGroup" type="D2LogicalModel:IndexReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'GroupOfParkingSpaces', which is identical from a local point of view. To be
used when defining mixed parking areas with different time slots.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="realSubsetOfGroup" type="D2LogicalModel:IndexReference" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'GroupOfParkingSpaces', which is a real superset from a local point of view.
To be used when defining mixed parking areas with different time slots.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="minimumParkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
          <xs:annotation>

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    <xs:documentation>Lower dimension boundaries for all spaces within the group. Note that there must not exist a space with
this dimension, but each space's dimension values must be equal or higher.</xs:documentation>
  </xs:annotation>
</xs:element>
  <xs:element name="dimensionOfGroup" type="D2LogicalModel:Dimension" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Dimension of a virtual rectangle encapsulating the group of parking spaces. Use 'dimensionUsableArea'
to define the total space available for parking within this group. Do not use 'dimensionHeight'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="maximumParkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Dimension of the largest space within this group (i.e. there must be at least one space of this dimension).
If the comparison of dimension values is not unique, the length is decisive.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingSpace" type="D2LogicalModel:_GroupOfParkingSpacesParkingSpaceIndexParkingSpace"
minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
    <xs:element name="groupOfParkingSpacesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:extension>
</xs:complexType>
<xs:complexType name="HazardousMaterials">
  <xs:annotation>
    <xs:documentation>Details of hazardous materials.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="chemicalName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The chemical name of the hazardous substance carried by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsFlashPoint" type="D2LogicalModel:TemperatureCelsius" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The temperature at which the vapour from a hazardous substance will ignite in air.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dangerousGoodsRegulations" type="D2LogicalModel:DangerousGoodsRegulationsEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The code defining the regulations, international or national, applicable for a means of
transport.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeIdentification" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The dangerous goods description code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardCodeVersionNumber" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The version/revision number of date of issuance of the hazardous material code used.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="hazardSubstanceItemPageNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A number giving additional hazard code classification of a goods item within the applicable dangerous

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goods regulation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tremCardNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The identification of a transport emergency card giving advice for emergency actions.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="undgNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A unique serial number assigned within the United Nations to substances and articles contained in a list of
the dangerous goods most commonly carried.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="volumeOfDangerousGoods" type="D2LogicalModel:CubicMetres" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The volume of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="weightOfDangerousGoods" type="D2LogicalModel:Tonnes" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The weight of dangerous goods on the vehicle(s) reported in a traffic/travel situation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="hazardousMaterialsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaderInformation">
  <xs:annotation>
    <xs:documentation>Management information relating to the data contained within a publication.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="areaOfInterest" type="D2LogicalModel:AreaOfInterestEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent of the geographic area to which the related information should be
distributed.</xs:documentation>
      </xs:annotation>
</xs:element>
<xs:element name="confidentiality" type="D2LogicalModel:ConfidentialityValueEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The extent to which the related information may be circulated, according to the recipient type. Recipients
must comply with this confidentiality statement.</xs:documentation>
      </xs:annotation>
</xs:element>
<xs:element name="informationStatus" type="D2LogicalModel:InformationStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the related information (real, test, exercise ....).</xs:documentation>
      </xs:annotation>
</xs:element>
<xs:element name="urgency" type="D2LogicalModel:UrgencyEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>This indicates the urgency with which a message recipient or Client should distribute the enclosed
information. Urgency particularly relates to functions within RDS-TMC applications. </xs:documentation>
      </xs:annotation>
</xs:element>
<xs:element name="headerInformationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeaviestAxleWeightCharacteristic">

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<xs:annotation>
  <xs:documentation>Weight characteristic of the heaviest axle on the vehicle.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="heaviestAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The weight of the heaviest axle on the vehicle.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="heaviestAxleWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="HeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Height characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="HeightGradeEnum">
  <xs:annotation>
    <xs:documentation>List of height or vertical gradings of road sections.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="aboveGrade">
      <xs:annotation>
        <xs:documentation>Above or over the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atGrade">
      <xs:annotation>
        <xs:documentation>At the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="belowGrade">
      <xs:annotation>
        <xs:documentation>Below or under the normal road grade elevation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="IndexReference">

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<xs:annotation>
  <xs:documentation>A reference to an object given by its index qualifier.</xs:documentation>
</xs:annotation>
<xs:restriction base="D2LogicalModel:String" />
</xs:simpleType>
<xs:simpleType name="InformationStatusEnum">
  <xs:annotation>
    <xs:documentation>Status of the related information (i.e. real, test or exercise).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="real">
      <xs:annotation>
        <xs:documentation>The information is real. It is not a test or exercise.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which is for testing security.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="technicalExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which includes tests of associated technical
subsystems.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="test">
      <xs:annotation>
        <xs:documentation>The information is part of a test for checking the exchange of this type of information.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Integer">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {-2147483648, -2147483647, -2147483646, ..., -2, -1, 0, 1, 2,
..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:integer" />
</xs:simpleType>
<xs:complexType name="InternationalIdentifier">
  <xs:annotation>
    <xs:documentation>An identifier/name whose range is specific to the particular country.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="nationalIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier or name unique within the specified country.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="internationalIdentifierExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="InterUrbanParkingSite">

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<xs:annotation>
  <xs:documentation>A parking site in an interurban context.</xs:documentation>
</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:ParkingSite">
    <xs:sequence>
      <xs:element name="interUrbanParkingSiteLocation" type="D2LogicalModel:InterUrbanParkingSiteLocationEnum"
minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>Defines whether the interurban parking site is located in or nearby a motorway context, is a layby or on-
street parking.</xs:documentation>
        </xs:annotation>
        </xs:element>
        <xs:element name="interUrbanParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="InterUrbanParkingSiteLocationEnum">
  <xs:annotation>
    <xs:documentation>Location of the truck or motorway related parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorway">
      <xs:annotation>
        <xs:documentation>The parking is located directly on a motorway or a similar type of road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nearbyMotorway">
      <xs:annotation>
        <xs:documentation>The parking is located with some distance to a motorway or a similar type of road but focussed on travellers
from this motorway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="layBy">
      <xs:annotation>
        <xs:documentation>An area along a road that offers temporary parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="onStreet">
      <xs:annotation>
        <xs:documentation>Vehicles are parking on the roadside.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>The parking is located somewhere else.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="Itinerary" abstract="true">
  <xs:annotation>
    <xs:documentation>Multiple (i.e. more than one) physically separate locations arranged as an ordered set that defines an itinerary
or route.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:GroupOfLocations">
      <xs:sequence>

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<xs:element name="routeDestination" type="D2LogicalModel:Destination" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Destination of a route or final location in an itinerary.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="itineraryExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="ItineraryByIndexedLocations">
  <xs:annotation>
    <xs:documentation>Multiple physically separate locations arranged as an ordered set that defines an itinerary or route. The index
qualifier indicates the order.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Itinerary">
      <xs:sequence>
        <xs:element name="locationContainedInItinerary" type="D2LogicalModel:_LocationContainedInItinerary" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A location contained in an itinerary (i.e. an ordered set of locations defining a route or
itinerary).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="itineraryByIndexedLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="ItineraryByReference">
  <xs:annotation>
    <xs:documentation>Multiple (i.e. more than one) physically separate locations which are ordered that constitute an itinerary or
route where they are defined by reference to a predefined itinerary.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Itinerary">
      <xs:sequence>
        <xs:element name="predefinedItineraryReference" type="D2LogicalModel:_PredefinedItineraryVersionedReference"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned instance of a predefined itinerary as specified in a
PredefinedLocationsPublication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="itineraryByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="Junction">
  <xs:annotation>
    <xs:documentation>Junction (on a highway), can also be an interchange or if applicable also a motorway service station (see
junctionClassification).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="junctionClassification" type="D2LogicalModel:JunctionClassificationEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Explicit type of junction.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

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</xs:annotation>
</xs:element>
<xs:element name="junctionName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Name of the junction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="junctionNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of the junction, might also include letters (example: 23A).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="motorway" type="D2LogicalModel:Road" minOccurs="0">
  <xs:annotation>
    <xs:documentation>A detailed identification of the motorway the junction belongs to.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="destinationMotorway" type="D2LogicalModel:Road" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>In case of any type of intersection, the destination motorway(s) can be defined.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="junctionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="JunctionClassificationEnum">
  <xs:annotation>
    <xs:documentation>Explicit type of a junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="threeWayInterchange">
      <xs:annotation>
        <xs:documentation>One motorway merging into another (with three legs in total).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="interchange">
      <xs:annotation>
        <xs:documentation>Usually two crossing motorways (four legs, but can be even more).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="motorwayConnection">
      <xs:annotation>
        <xs:documentation>Beginning or end of a motorway (e.g. changeover to smaller road).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="junction">
      <xs:annotation>
        <xs:documentation>Entrance and exit on a motorway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="temporaryJunction">
      <xs:annotation>
        <xs:documentation>Entrance and exit on a motorway, reserved either for emergency and service or on a temporary
basis.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="borderCrossing">
      <xs:annotation>
        <xs:documentation>Motorway crossing a border (between counties, countries, states, ...).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:annotation>
</xs:enumeration>
<xs:enumeration value="junctionInOneDirection">
  <xs:annotation>
    <xs:documentation>Entry and Exit on a motorway, where just one direction of the motorway is accessible.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="operationalServiceJunction">
  <xs:annotation>
    <xs:documentation>Junction accessible only for operational services.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LABELSecurityLevelEnum">
  <xs:annotation>
    <xs:documentation>Security level defined by the LABEL project http://truckparkinglabel.eu.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>None.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel1">
      <xs:annotation>
        <xs:documentation>Providing the basics.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel2">
      <xs:annotation>
        <xs:documentation>Technical measures to improve security.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel3">
      <xs:annotation>
        <xs:documentation>Security measures are combined, Access of persons restricted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel4">
      <xs:annotation>
        <xs:documentation>Real time monitoring of vehicles and persons by professional staff.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityLevel5">
      <xs:annotation>
        <xs:documentation>Verification of vehicles and persons by professional staff, site manned around the
clock.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LABELServiceLevelEnum">
  <xs:annotation>
    <xs:documentation>Service level defined by the LABEL project http://truckparkinglabel.eu.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>None.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel1">
      <xs:annotation>
        <xs:documentation>Providing the basics.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel2">
      <xs:annotation>
        <xs:documentation>Also providing washing facilities and a more convenient lay-out of the parking area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel3">
      <xs:annotation>
        <xs:documentation>Providing service for personal hygiene and shop/ fuel station.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel4">
      <xs:annotation>
        <xs:documentation>Providing full service for driver and vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceLevel5">
      <xs:annotation>
        <xs:documentation>Providing the high end of comfort levels.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LaneEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors identifying specific lanes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allLanesCompleteCarriageway">
      <xs:annotation>
        <xs:documentation>In all lanes of the carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="busLane">
      <xs:annotation>
        <xs:documentation>In the bus lane.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
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</xs:enumeration>
<xs:enumeration value="busStop">
  <xs:annotation>
    <xs:documentation>In the bus stop lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carPoolLane">
  <xs:annotation>
    <xs:documentation>In the carpool lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="centralReservation">
  <xs:annotation>
    <xs:documentation>On the central median separating the two directional carriageways of the highway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="crawlerLane">
  <xs:annotation>
    <xs:documentation>In the crawler lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="emergencyLane">
  <xs:annotation>
    <xs:documentation>In the emergency lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="escapeLane">
  <xs:annotation>
    <xs:documentation>In the escape lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="expressLane">
  <xs:annotation>
    <xs:documentation>In the express lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hardShoulder">
  <xs:annotation>
    <xs:documentation>On the hard shoulder.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyVehicleLane">
  <xs:annotation>
    <xs:documentation>In the heavy vehicle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane1">
  <xs:annotation>
    <xs:documentation>In the first lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane2">
  <xs:annotation>
    <xs:documentation>In the second lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane3">
  <xs:annotation>
    <xs:documentation>In the third lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>

```

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane4">
  <xs:annotation>
    <xs:documentation>In the fourth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane5">
  <xs:annotation>
    <xs:documentation>In the fifth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane6">
  <xs:annotation>
    <xs:documentation>In the sixth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane7">
  <xs:annotation>
    <xs:documentation>In the seventh lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane8">
  <xs:annotation>
    <xs:documentation>In the eighth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lane9">
  <xs:annotation>
    <xs:documentation>In the ninth lane numbered from nearest the hard shoulder to central median.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="layBy">
  <xs:annotation>
    <xs:documentation>In a lay-by.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftHandTurningLane">
  <xs:annotation>
    <xs:documentation>In the left hand turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leftLane">
  <xs:annotation>
    <xs:documentation>In the left lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="localTrafficLane">
  <xs:annotation>
    <xs:documentation>In the local traffic lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="middleLane">
  <xs:annotation>
    <xs:documentation>In the middle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="opposingLanes">
  <xs:annotation>
```



```

    <xs:documentation>In the opposing lanes.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overtakingLane">
  <xs:annotation>
    <xs:documentation>In the overtaking lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightHandTurningLane">
  <xs:annotation>
    <xs:documentation>In the right hand turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rightLane">
  <xs:annotation>
    <xs:documentation>In the right lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="rushHourLane">
  <xs:annotation>
    <xs:documentation>In the lane dedicated for use during the rush (peak) hour.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="setDownArea">
  <xs:annotation>
    <xs:documentation>In the area/lane reserved for passenger pick-up or set-down.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="slowVehicleLane">
  <xs:annotation>
    <xs:documentation>In the slow vehicle lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="throughTrafficLane">
  <xs:annotation>
    <xs:documentation>In the through traffic lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tidalFlowLane">
  <xs:annotation>
    <xs:documentation>In the lane dedicated for use as a tidal flow lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="turningLane">
  <xs:annotation>
    <xs:documentation>In the turning lane.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="verge">
  <xs:annotation>
    <xs:documentation>On the verge.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Language">
  <xs:annotation>
    <xs:documentation>A language datatype, identifies a specified language by an ISO 639-1 2-alpha / ISO 639-2 3-alpha
code.</xs:documentation>

```

```

</xs:annotation>
<xs:restriction base="xs:language" />
</xs:simpleType>
<xs:complexType name="LengthCharacteristic">
  <xs:annotation>
    <xs:documentation>Length characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleLength" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The overall distance between the front and back of an individual vehicle, including the length of any trailers,
couplings, etc.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lengthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Linear">
  <xs:annotation>
    <xs:documentation>A linear section along a single road with optional directionality defined between two points on the same road.
</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NetworkLocation">
      <xs:sequence>
        <xs:element name="tpegLinearLocation" type="D2LogicalModel:TpegLinearLocation" minOccurs="0" />
        <xs:element name="alertCLinear" type="D2LogicalModel:AlertCLinear" minOccurs="0" />
        <xs:element name="linearWithinLinearElement" type="D2LogicalModel:LinearWithinLinearElement" minOccurs="0" />
        <xs:element name="linearExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="LinearElement">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object, consistent with ISO 19148 definitions. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="roadName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the road of which the linear element forms a part.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadNumber" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier/number of the road of which the linear element forms a part.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearElementReferenceModel" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The identifier of a road network reference model which segments the road network according to specific
business rules.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

<xs:element name="linearElementReferenceModelVersion" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The version of the identified road network reference model.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElementNature" type="D2LogicalModel:LinearElementNatureEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>An indication of the nature of the linear element.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="LinearElementByCode">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object defined by its identifier or code in a road network reference model
(specified in LinearElement class) which segments the road network according to specific business rules.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:LinearElement">
      <xs:sequence>
        <xs:element name="linearElementIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>An identifier or code of a linear element (or link) in the road network reference model that is specified in
the LinearElement class. </xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="linearElementByCodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="LinearElementByPoints">
  <xs:annotation>
    <xs:documentation>A linear element along a single linear object defined by its start and end points.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:LinearElement">
      <xs:sequence>
        <xs:element name="startPointOfLinearElement" type="D2LogicalModel:Referent">
          <xs:annotation>
            <xs:documentation>The referent at a known location on the linear object which defines the start of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="intermediatePointOnLinearElement" type="D2LogicalModel:_IntermediatePointOnLinearElement"
minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A referent at a known location on the linear object which is neither the start or end of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endPointOfLinearElement" type="D2LogicalModel:Referent">
          <xs:annotation>
            <xs:documentation>The referent at a known location on the linear object which defines the end of the linear
element.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="linearElementByPointsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="LinearElementNatureEnum">
  <xs:annotation>
    <xs:documentation>List of indicative natures of linear elements.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="road">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="roadSection">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a section of a road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="slipRoad">
      <xs:annotation>
        <xs:documentation>The nature of the linear element is a slip road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LinearReferencingDirectionEnum">
  <xs:annotation>
    <xs:documentation>Directions of traffic flow relative to the direction in which the linear element is defined.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="both">
      <xs:annotation>
        <xs:documentation>Indicates that both directions of traffic flow are affected by the situation or relate to the traffic
data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="opposite">
      <xs:annotation>
        <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the
opposite sense to the direction in which the linear element is defined.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aligned">
      <xs:annotation>
        <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the same
sense as the direction in which the linear element is defined.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Indicates that the direction of traffic flow affected by the situation or related to the traffic data is
unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="LinearWithinLinearElement">
  <xs:annotation>
    <xs:documentation>A linear section along a linear element where the linear element is either a part of or the whole of a linear
object (i.e. a road), consistent with ISO 19148 definitions. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="administrativeAreaOfLinearSection" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the road administration area which contains the specified linear
section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionBoundOnLinearSection" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow on the linear section in terms of general destination
direction.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionRelativeOnLinearSection" type="D2LogicalModel:LinearReferencingDirectionEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow on the linear section relative to the direction in which the linear element is
defined.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightGradeOfLinearSection" type="D2LogicalModel:HeightGradeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of whether the linear section that is part of the linear element is at, above or below the normal
elevation of a linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade"
separation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearElement" type="D2LogicalModel:LinearElement" />
    <xs:element name="fromPoint" type="D2LogicalModel:DistanceAlongLinearElement">
      <xs:annotation>
        <xs:documentation>A point on the linear element that defines the start node of the linear section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="toPoint" type="D2LogicalModel:DistanceAlongLinearElement">
      <xs:annotation>
        <xs:documentation>A point on the linear element that defines the end node of the linear section.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="linearWithinLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="LoadType2Enum">
  <xs:annotation>
    <xs:documentation>Loads that are currently not supported in loadType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="refrigeratedGoods">
      <xs:annotation>
        <xs:documentation>Refrigerated goods.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="LoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of load carried by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abnormalLoad">
      <xs:annotation>
        <xs:documentation>A load that exceeds normal vehicle dimensions in terms of height, length, width, gross vehicle weight or axle weight or any combination of these. Generally termed an "abnormal load".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ammunition">
      <xs:annotation>
        <xs:documentation>Ammunition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="chemicals">
      <xs:annotation>
        <xs:documentation>Chemicals of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="combustibleMaterials">
      <xs:annotation>
        <xs:documentation>Combustible materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="corrosiveMaterials">
      <xs:annotation>
        <xs:documentation>Corrosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="debris">
      <xs:annotation>
        <xs:documentation>Debris of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="empty">
      <xs:annotation>
        <xs:documentation>No load.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="explosiveMaterials">
      <xs:annotation>
        <xs:documentation>Explosive materials of unspecified type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="extraHighLoad">
      <xs:annotation>
        <xs:documentation>A load of exceptional height.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="extraLongLoad">
      <xs:annotation>
        <xs:documentation>A load of exceptional length.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

```

<xs:enumeration value="extraWideLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional width.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fuel">
  <xs:annotation>
    <xs:documentation>Fuel of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="glass">
  <xs:annotation>
    <xs:documentation>Glass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="goods">
  <xs:annotation>
    <xs:documentation>Any goods of a commercial nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hazardousMaterials">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a hazardous nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquid">
  <xs:annotation>
    <xs:documentation>Liquid of an unspecified nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="livestock">
  <xs:annotation>
    <xs:documentation>Livestock.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materials">
  <xs:annotation>
    <xs:documentation>General materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForPeople">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a danger to people or animals.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForTheEnvironment">
  <xs:annotation>
    <xs:documentation>Materials classed as being potentially dangerous to the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForWater">
  <xs:annotation>
    <xs:documentation>Materials classed as being dangerous when exposed to water (e.g. materials which may react
exothermically with water).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="oil">
  <xs:annotation>
    <xs:documentation>Oil.</xs:documentation>
  </xs:annotation>

```

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="ordinary">
  <xs:annotation>
    <xs:documentation>Materials that present limited environmental or health risk. Non-combustible, non-toxic, non-
corrosive.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="perishableProducts">
  <xs:annotation>
    <xs:documentation>Products or produce that will significantly degrade in quality or freshness over a short period of
time.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>
    <xs:documentation>Petrol or petroleum.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmaceuticalMaterials">
  <xs:annotation>
    <xs:documentation>Pharmaceutical materials.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="radioactiveMaterials">
  <xs:annotation>
    <xs:documentation>Materials that emit significant quantities of electro-magnetic radiation that may present a risk to people,
animals or the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuse">
  <xs:annotation>
    <xs:documentation>Refuse.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="toxicMaterials">
  <xs:annotation>
    <xs:documentation>Materials of a toxic nature which may damage the environment or endanger public
health.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicles">
  <xs:annotation>
    <xs:documentation>Vehicles of any type which are being transported.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Location" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification of a location either on a network (as a point or a linear location) or as an area. This may be
provided in one or more referencing systems.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
```



```

<xs:extension base="D2LogicalModel:GroupOfLocations">
  <xs:sequence>
    <xs:element name="externalReferencing" type="D2LogicalModel:ExternalReferencing" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="locationForDisplay" type="D2LogicalModel:PointCoordinates" minOccurs="0">
      <xs:annotation>
        <xs:documentation>A location which may be used by clients for visual display on user interfaces.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="locationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="LocationByReference">
  <xs:annotation>
    <xs:documentation>A location defined by reference to a predefined location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="predefinedLocationReference" type="D2LogicalModel:_PredefinedLocationVersionedReference"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned predefined location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="locationByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="LocationDescriptorEnum">
  <xs:annotation>
    <xs:documentation>List of descriptors to help to identify a specific location.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="aroundABendInRoad">
      <xs:annotation>
        <xs:documentation>Around a bend in the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atMotorwayInterchange">
      <xs:annotation>
        <xs:documentation>At a motorway interchange.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atRestArea">
      <xs:annotation>
        <xs:documentation>At rest area off the carriageway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atServiceArea">
      <xs:annotation>
        <xs:documentation>At service area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atTollPlaza">
      <xs:annotation>

```

```
<xs:documentation>At toll plaza.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="atTunnelEntryOrExit">
  <xs:annotation>
    <xs:documentation>At entry or exit of tunnel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inbound">
  <xs:annotation>
    <xs:documentation>On the carriageway or lane which is inbound towards the centre of the town or city.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inGallery">
  <xs:annotation>
    <xs:documentation>In gallery.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTheCentre">
  <xs:annotation>
    <xs:documentation>In the centre of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTheOppositeDirection">
  <xs:annotation>
    <xs:documentation>In the opposite direction.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inTunnel">
  <xs:annotation>
    <xs:documentation>In tunnel.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onBorder">
  <xs:annotation>
    <xs:documentation>On border crossing.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onBridge">
  <xs:annotation>
    <xs:documentation>On bridge.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onConnector">
  <xs:annotation>
    <xs:documentation>On connecting carriageway between two different roads or road sections.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onElevatedSection">
  <xs:annotation>
    <xs:documentation>On elevated section of road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onFlyover">
  <xs:annotation>
    <xs:documentation>On flyover, i.e. on section of road over another road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onIceRoad">
```

```

<xs:annotation>
  <xs:documentation>On ice road.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="onLevelCrossing">
  <xs:annotation>
    <xs:documentation>On level-crossing.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onLinkRoad">
  <xs:annotation>
    <xs:documentation>On road section linking two different roads.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onPass">
  <xs:annotation>
    <xs:documentation>On mountain pass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onRoundabout">
  <xs:annotation>
    <xs:documentation>On roundabout.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheLeft">
  <xs:annotation>
    <xs:documentation>On the left of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheRight">
  <xs:annotation>
    <xs:documentation>On the right of the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onTheRoadway">
  <xs:annotation>
    <xs:documentation>On the roadway.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onUndergroundSection">
  <xs:annotation>
    <xs:documentation>On underground section of road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onUnderpass">
  <xs:annotation>
    <xs:documentation>On underpass, i.e. section of road which passes under another road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="outbound">
  <xs:annotation>
    <xs:documentation>On the carriageway or lane which is outbound from the centre of the town or city.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overCrestOfHill">
  <xs:annotation>
    <xs:documentation>Over the crest of a hill.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

<xs:enumeration value="withinJunction">
  <xs:annotation>
    <xs:documentation>On the main carriageway within a junction between exit slip road and entry slip road.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MeansOfPaymentEnum">
  <xs:annotation>
    <xs:documentation>Means of payment</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="paymentCard">
      <xs:annotation>
        <xs:documentation>Payment by electronic card(s). Use 'AcceptedPaymentCards' resp. 'UsedPaymentCard' to specify them
more exactly.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cash">
      <xs:annotation>
        <xs:documentation>Cash payment.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cashCoinsOnly">
      <xs:annotation>
        <xs:documentation>Cash payment with coins only.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="directCashTransfer">
      <xs:annotation>
        <xs:documentation>Direct cash transfer.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="electronicSettlement">
      <xs:annotation>
        <xs:documentation>Electronic settlement; includes on board units.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="rfid">
      <xs:annotation>
        <xs:documentation>RFID.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mobileApp">
      <xs:annotation>
        <xs:documentation>Payment method using an app on a smartphone.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payBySMS">
      <xs:annotation>
        <xs:documentation>Payment by SMS. The telephone number can be specified by
'paymentAdditionalDescription'.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mobilePhone">
      <xs:annotation>
        <xs:documentation>A payment method using a mobile phone but without an app or SMS, for instance by calling a
number.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MetresAsFloat">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a floating point format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="MetresAsNonNegativeInteger">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a non negative integer format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:simpleType name="MonthOfYearEnum">
  <xs:annotation>
    <xs:documentation>A list of the months of the year.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="january">
      <xs:annotation>
        <xs:documentation>The month of January.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="february">
      <xs:annotation>
        <xs:documentation>The month of February.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="march">
      <xs:annotation>
        <xs:documentation>The month of March.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="april">
      <xs:annotation>
        <xs:documentation>The month of April.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="may">
      <xs:annotation>
        <xs:documentation>The month of May.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="june">
      <xs:annotation>
        <xs:documentation>The month of June.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="july">
  <xs:annotation>
    <xs:documentation>The month of July.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="august">
  <xs:annotation>
    <xs:documentation>The month of August.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="september">
  <xs:annotation>
    <xs:documentation>The month of September.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="october">
  <xs:annotation>
    <xs:documentation>The month of October.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="november">
  <xs:annotation>
    <xs:documentation>The month of November.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="december">
  <xs:annotation>
    <xs:documentation>The month of December.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value" type="D2LogicalModel:MultilingualStringValue" maxOccurs="unbounded" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValue" type="D2LogicalModel:MultilingualStringValue" />
    <xs:attribute name="lang" type="xs:language" />
  </xs:simpleContent>
</xs:complexType>
<xs:simpleType name="MultilingualStringValue" type="D2LogicalModel:MultilingualStringValue">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="NamedArea">
  <xs:annotation>
    <xs:documentation>An area defined by a name and/or in terms of known boundaries, such as country or county boundaries or

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allocated control area of particular authority. The attributes do not form a union; instead, the smallest intersection forms the resulting area.</xs:documentation>

```

</xs:annotation>
<xs:sequence>
  <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="nation" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of an ISO recognised country.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="county" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="areaName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name of an area.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="policeForceControlArea" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name of a police force area.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="roadOperatorControlArea" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name of a road operator control area.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="namedAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="NetworkLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>The specification of a location on a network (as a point or a linear location).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="supplementaryPositionalDescription" type="D2LogicalModel:SupplementaryPositionalDescription"
minOccurs="0" />
        <xs:element name="destination" type="D2LogicalModel:Destination" minOccurs="0" />
        <xs:element name="networkLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="NonNegativeInteger">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646,
2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:nonNegativeInteger" />
</xs:simpleType>

```

```

<xs:complexType name="NonOrderedLocationGroupByList">
  <xs:annotation>
    <xs:documentation>A group of (i.e. more than one) physically separate locations which have no specific order and where each location is explicitly listed.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NonOrderedLocations">
      <xs:sequence>
        <xs:element name="locationContainedInGroup" type="D2LogicalModel:Location" minOccurs="2" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A location contained in a non ordered group of locations.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="nonOrderedLocationGroupByListExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NonOrderedLocationGroupByReference">
  <xs:annotation>
    <xs:documentation>A group of (i.e. more than one) physically separate locations which have no specific order that are defined by reference to a predefined non ordered location group.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NonOrderedLocations">
      <xs:sequence>
        <xs:element name="predefinedNonOrderedLocationGroupReference"
type="D2LogicalModel:_PredefinedNonOrderedLocationGroupVersionedReference" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A reference to a versioned instance of a predefined non ordered location group as specified in a PredefinedLocationsPublication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="nonOrderedLocationGroupByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0"
/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NonOrderedLocations" abstract="true">
  <xs:annotation>
    <xs:documentation>Multiple (i.e. more than one) physically separate locations which have no specific order.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:GroupOfLocations">
      <xs:sequence>
        <xs:element name="nonOrderedLocationsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="NumberOfAxlesCharacteristic">
  <xs:annotation>
    <xs:documentation>Number of axles characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```



```

</xs:annotation>
</xs:element>
<xs:element name="numberOfAxles" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The total number of axles of an individual vehicle.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="numberOfAxlesCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="OccupancyDetectionTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="none">
      <xs:annotation>
        <xs:documentation>No occupancy detection available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="balancing">
      <xs:annotation>
        <xs:documentation>Counting and balancing incoming and outgoing traffic amount ('indirect' method).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="singleSpaceDetection">
      <xs:annotation>
        <xs:documentation>There is a detector for every individual parking space ('direct' method).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="modelBased">
      <xs:annotation>
        <xs:documentation>Occupancy detection is based on some model, i.e. hydrograph, forecasting or
estimation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="manual">
      <xs:annotation>
        <xs:documentation>Manual collection of occupancy information, i.e. operators count the vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unspecified">
      <xs:annotation>
        <xs:documentation>Unspecified.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="OffsetDistance">

```

```

<xs:annotation>
  <xs:documentation>The non negative offset distance from the ALERT-C referenced point to the actual point.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="offsetDistance" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The non negative offset distance from the ALERT-C referenced point to the actual point. The ALERT-C
locations in the Primary and Secondary locations must always encompass the linear section being specified, thus Offset Distance is
towards the other point.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="offsetDistanceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="OpeningTimes">
  <xs:annotation>
    <xs:documentation>A specification of opening times (e.g. for a parking site, a service facility, an access or the availability for
equipment).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="lastUpdated" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The date/time at which this information was last updated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openAllYear" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>indicates whether the parking facility is available 365 days a year</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="available24hours" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies if the availability is 24 hours a day. If omitted, this information is unknown or
heterogeneous.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="urlLinkAddress" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
further relevant information may be obtained.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openingTimesUnknown" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the opening times are unknown.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="openingTimesNotSpecified" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the opening times are not specified.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validity" type="D2LogicalModel:Validity" minOccurs="0" />
    <xs:element name="openingTimesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OverallPeriod">
  <xs:annotation>
    <xs:documentation>A continuous or discontinuous period of validity defined by overall bounding start and end times and the

```

possible intersection of valid periods (potentially recurring) with the complement of exception periods (also potentially recurring).</xs:documentation>

```

</xs:annotation>
<xs:sequence>
  <xs:element name="overallStartTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Start of bounding period of validity defined by date and time.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overallEndTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>End of bounding period of validity defined by date and time.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="validPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is true.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="exceptionPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is false.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overallPeriodExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="OwnershipTypeEnum">
  <xs:annotation>
    <xs:documentation>Ownership type enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="public">
      <xs:annotation>
        <xs:documentation>Public ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="private">
      <xs:annotation>
        <xs:documentation>Private ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="publicPrivate">
      <xs:annotation>
        <xs:documentation>A public private partnership model.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="resident">
      <xs:annotation>
        <xs:documentation>A private individual ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>An unknown kind of ownership.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other kind of ownership.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingAccess">
  <xs:annotation>
    <xs:documentation>Describes one entrance or exit (or both) to a parking site.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="accessCategory" type="D2LogicalModel:AccessCategoryEnum" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies the category(s) of this access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A name of the entrance or exit. This might be an indication to the corresponding road, for
example.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessEquipment" type="D2LogicalModel:AccessEquipmentEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies additional equipment for this access.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="photoUrl" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessOnlyAssignedFor" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Only the assignment given in this class is allowed for this access, i.e. other assignments are not allowed.
By using this role, do not use the same set of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessAssignedAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The assignment given in this class is convenient for this access, but not exclusionary. By using this role, do
not use the same set of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessProhibitedFor" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The assignment given in this class is prohibited for this access. By using this role, do not use the same set
of attributes within the other two roles.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="primaryRoad" type="D2LogicalModel:Road" maxOccurs="unbounded">
      <xs:annotation>

```

```

    <xs:documentation>Identification for up to two primary roads located nearby the access or which make the parking
accessible.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="location" type="D2LogicalModel:Location" />
<xs:element name="openingTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0" />
<xs:element name="parkingAccessExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingAssignment">
  <xs:annotation>
    <xs:documentation>One set of prohibited/only allowed/convenient assignment for parking space(s), parking site(s) or an access.
Same kind of data forms a union (e.g. lorries OR buses), different kind of data forms an intersection (e.g. residents AND long-
term).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Limitation to a set of special users.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingDuration" type="D2LogicalModel:ParkingDurationEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Temporal parking classification for this assignment (long term, short term, ...). Depending on the used role,
these classifications are either assigned or prohibited.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleCharacteristics" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="hazardousMaterials" type="D2LogicalModel:HazardousMaterials" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Hazardous Material which is prohibited to park there.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="timePeriodByHour" type="D2LogicalModel:TimePeriodByHour" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Used for example for mixed parking areas. If at least one restrictedValidity is given, spaces are not
available outside the union of all given time ranges. EndTime might be a lower value than start time, when validity contains
midnight.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermit" type="D2LogicalModel:ParkingPermit" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="parkingAssignmentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingDurationEnum">
  <xs:annotation>
    <xs:documentation>Parking durations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="pickUpDropOff">
      <xs:annotation>
        <xs:documentation>Very short duration parking normally of up to 20 minutes assigned for pick-ups and drop-
offs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shortTerm">
      <xs:annotation>

```

```

    <xs:documentation>Short term parking without indication of max-duration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm24hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 24 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm48hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 48 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm72hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 72 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="shortTerm96hours">
  <xs:annotation>
    <xs:documentation>Short term parking up to 96 hours.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="longTerm">
  <xs:annotation>
    <xs:documentation>Long term parking in excess of any specified short term parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingEquipmentOrServiceFacility" abstract="true">
  <xs:annotation>
    <xs:documentation>One type of equipment or additional service facility that is available at the parking site, parking space or group
of parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="equipmentOrServiceFacilityIdentifier" type="D2LogicalModel:String" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>An internal identifier for the equipment or service facility, e.g. an inventory number. This attribute has an
unbounded multiplicity to support identifiers for multiple occurrences of this element.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="availability" type="D2LogicalModel:AvailabilityEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies, if the element in question is available or not. Note that this is no dynamic
information!</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

<xs:element name="numberOfEquipmentOrServiceFacility" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of the specified element (e.g. number of toilets, restaurants, park & ride places, etc.) with
respect to user restriction for the parking record, a complete group of spaces or a single space. Dynamic
overridable.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="additionalDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Provides an additional description.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="otherEquipmentOrServiceFacility" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the additional equipment or service facility, if the enumerations provided do not fit. Use literal
'other' in this case.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="nameOrBrand" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Name or brand of the equipment or service facility, e.g. brand of petrol station, name of the WC-Service
etc.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="comment" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A free text comment that can be used by the operator to convey un-coded
observations/information.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="photoUrl" type="D2LogicalModel:Url" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="applicableForUser" type="D2LogicalModel:UserTypeEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Limitation to a set of special users.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="availabilityAndOpeningTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Specify the general availability of some equipment or service facility (by using just the 'OverallPeriod'
component) or specify its opening times more detailed.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tariffsAndPayment" type="D2LogicalModel:TariffsAndPayment" minOccurs="0" />
<xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
<xs:element name="applicableForVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="parkingEquipmentOrServiceFacilityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>

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```
<xs:simpleType name="ParkingLayoutEnum">
  <xs:annotation>
    <xs:documentation>Types of layout of the parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="multiStorey">
      <xs:annotation>
        <xs:documentation>Parking is on multiple levels within a parking building.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="singleLevel">
      <xs:annotation>
        <xs:documentation>Parking is inside a building on a single ground floor level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="underground">
      <xs:annotation>
        <xs:documentation>Parking is on one or more floors below ground level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="undergroundAndMultistorey">
      <xs:annotation>
        <xs:documentation>Parking is on multiple floors levels including both below and above ground level. </xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="automatedParkingGarage">
      <xs:annotation>
        <xs:documentation>Parking is completely automated from the point of leaving the vehicle in an arrival bay to its delivery back to
the driver in a pickup bay.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="openSpace">
      <xs:annotation>
        <xs:documentation>A normal ground level parking place.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="covered">
      <xs:annotation>
        <xs:documentation>Some covered parking space.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nested">
      <xs:annotation>
        <xs:documentation>A parking space within a complex structure of buildings or surrounded by buildings.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="field">
      <xs:annotation>
        <xs:documentation>A non-bituminized parking space (e.g. for events or as extension).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>Unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```



```

    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingModeEnum">
  <xs:annotation>
    <xs:documentation>The arrangement of the parking space or the group of parking spaces in relation to the
road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="perpendicularParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located in an angle of nearly 90 degree to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="parallelParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located parallel to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="echelonParking">
      <xs:annotation>
        <xs:documentation>Parking spaces are located in a diagonal relation to the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="parkingOnOppositeSideOfRoad">
      <xs:annotation>
        <xs:documentation>Parking is possible on the other side of the road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingPaymentModeEnum">
  <xs:annotation>
    <xs:documentation>Mode of payment for parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="payAndDisplay">
      <xs:annotation>
        <xs:documentation>Pay at machine and display ticket inside vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payManualAtExitBooth">
      <xs:annotation>
        <xs:documentation>Pay at the manned exit booth of the parking site. </xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payPriorToExit">
      <xs:annotation>
        <xs:documentation>Pay at machine on foot prior to returning to vehicle and use payment ticket to exit.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="payByPrepaidToken">
      <xs:annotation>

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```

    <xs:documentation>Pay by prepaid token that is used at exit.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="payAndExit">
  <xs:annotation>
    <xs:documentation>Pay directly at the exit with a payment card (usually, this payment card must have been used when entering
as well). In 'AccessEquipmentEnum', there are three more literals to indicate, whether an entrance or exit has got this
feature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingPermit">
  <xs:annotation>
    <xs:documentation>A permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingPermitType" type="D2LogicalModel:PermitTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Type of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitScheme" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Scheme of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitIdentifier" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier of permission for parking.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingPermitExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRecord" abstract="true">
  <xs:annotation>
    <xs:documentation>A container for static parking information. Must be specialised as a parking site or as a group of parking
sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the parking, i.e. name of the parking site or the group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingAlias" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Alternative name for the parking site or the group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Additional description of the parking site or the group of parking sites.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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```

</xs:annotation>
</xs:element>
<xs:element name="parkingRecordVersionTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Date/time that this version of the parking record was defined.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of parking spaces (attribute is used for a parking record as well as for a group of parking
spaces).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingPrincipalNumberOfSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of parking spaces that are not assigned for a particular purpose.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="maximumParkingDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to
avoid overnight parking).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="photoUrl" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies a URL at which a photo of the object in concern can be found.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where
further relevant information may be obtained.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupanyDetectionType" type="D2LogicalModel:OccupancyDetectionTypeEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if
any (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="emergencyContact" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact to be used in times of emergencies.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="owner" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the owner of the parking facility.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="responisbleAuthority" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the responsible authority of the parking facility or parking area.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="securityService" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">

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<xs:annotation>
  <xs:documentation>Contact details of one or more security services of the parking facility.</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="operator" type="D2LogicalModel:Contact" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of the operator of the parking facility.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="servicePartner" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Contact details of a service partner of the parking record, i.e. the person or organisation that should be
    contacted to provide servicing or support services for equipment at the parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingVMS" type="D2LogicalModel:ParkingVMS" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingLocation" type="D2LogicalModel:GroupOfLocations">
  <xs:annotation>
    <xs:documentation>The location(s) or the extent of the parking. Examples could be an Area for parking area, a Point location
    for an urban parking facility or a Linear for on street parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingRoute" type="D2LogicalModel:ParkingRoute" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingColour" type="D2LogicalModel:RGBColour" minOccurs="0">
  <xs:annotation>
    <xs:documentation>A colour, which can be assigned to the parking. Often used with parking areas for a quick visual
    distinction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="onlyAssignedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By
    using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of
    attributes.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="assignedParkingAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for
    this kind of assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="prohibitedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Parking is not allowed for the given assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tariffsAndPayment" type="D2LogicalModel:TariffsAndPayment" minOccurs="0" />
<xs:element name="parkingEquipmentOrServiceFacility"
type="D2LogicalModel:_ParkingRecordEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingSpace" type="D2LogicalModel:_ParkingSpace" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>Properties of a single parking space. This aggregation may only be used with the "ParkingSpace"
      specialisation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="groupOfParkingSpaces" type="D2LogicalModel:_GroupOfParkingSpaces" minOccurs="0"
maxOccurs="unbounded">

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    <xs:annotation>
      <xs:documentation>Properties for a group of parking spaces. Usually, all properties specified have to be the same for all spaces
      included. This aggregation may only be used with the "GroupOfParkingSpaces" specialisation.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingThresholds" type="D2LogicalModel:ParkingThresholds" minOccurs="0" />
  <xs:element name="permitsAndProhibitions" type="D2LogicalModel:PermitsAndProhibitions" minOccurs="0"
  maxOccurs="unbounded" />
  <xs:element name="emergencyAssemblyPoint" type="D2LogicalModel:GroupOfLocations" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Some geographic location(s) within or nearby the parking, where people have to meet in case of a fire, for
      example.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="entireArea" type="D2LogicalModel:Area" minOccurs="0">
    <xs:annotation>
      <xs:documentation>An underlying area this parking record is located in or belongs to. Examples are a state, province, truck
      parking area etc. A name can be specified in the area structure.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingRecordDimension" type="D2LogicalModel:Dimension" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Dimension either of the building or a virtual rectangle encapsulating the parking site(s). Use
      'dimensionUsableArea' to define the total space available for parking. Use 'dimensionHeight' only for a building, not for the restriction
      of vehicles.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingRecordExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingRoute" abstract="true">
  <xs:annotation>
    <xs:documentation>A parking route, defined by ParkingRouteDetails or by a reference.</xs:documentation>
  </xs:annotation>
</xs:sequence>
  <xs:element name="parkingRouteColour" type="D2LogicalModel:RGBColour" minOccurs="0">
    <xs:annotation>
      <xs:documentation>A colour assigned to a parking route for visualisation purpose.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingRouteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRouteByReference">
  <xs:annotation>
    <xs:documentation>A route defined by a reference to an earlier specified route.</xs:documentation>
  </xs:annotation>
</xs:complexContent>
  <xs:extension base="D2LogicalModel:ParkingRoute">
    <xs:sequence>
      <xs:element name="parkingRouteReference" type="D2LogicalModel:_ParkingRouteDetailsVersionedReference" minOccurs="1"
      maxOccurs="1">
        <xs:annotation>
          <xs:documentation>A reference to a parking route.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="parkingRouteByReferenceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>

```

```

</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="ParkingRouteDetails">
  <xs:annotation>
    <xs:documentation>Urban context: Defining parking routes leading to the parking site. Truck parking context: Can be used to
define a dynamic route management.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRoute">
      <xs:sequence>
        <xs:element name="parkingRouteName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Name of the parking route.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingRouteType" type="D2LogicalModel:ParkingRouteTypeEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of parking route. If not specified, the route is designed for any type of
vehicles.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="dynamicRouteManagement" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Indicates that there is dynamic route management for truck parking, i.e. a management system
concerning several truck parkings (including this one) along a route.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingRouteIconIndex" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>An index, which can identify some icon for visualisation of the route. Note that form and usage of this
index as well as the icons itself are not further determined here.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingRouteDirection" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The direction of traffic, for which the parking route can be used. If not specified, the route can be used in
the order of the given locations.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingRouteDirection2" type="D2LogicalModel:ParkingRouteDirectionEnum" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Additional directions of traffic, for which the parking route can be used. If not specified, the route can be
used in the order of the given locations.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfLocations" type="D2LogicalModel:GroupOfLocations" minOccurs="0" />
        <xs:element name="parkingRouteDetailsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
      <xs:attribute name="id" type="xs:string" use="required" />
      <xs:attribute name="version" type="xs:string" use="required" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingRouteDirectionEnum">
  <xs:annotation>
    <xs:documentation>The direction of the parking route.</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="towardsParkingSite">
    <xs:annotation>
      <xs:documentation>Towards parking site.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="awayFromParkingSite">
    <xs:annotation>
      <xs:documentation>Away from parking site.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingRouteTypeEnum">
  <xs:annotation>
    <xs:documentation>The type of the parking route.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="lorry">
      <xs:annotation>
        <xs:documentation>A parking route for lorries.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Another type of parking route.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingSecurityEnum">
  <xs:annotation>
    <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="socialControl">
      <xs:annotation>
        <xs:documentation>Social control e.g. parking situated in a neighbourhood.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityStaff">
      <xs:annotation>
        <xs:documentation>Security staff.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="externalSecurity">
      <xs:annotation>
        <xs:documentation>External security, e.g. police or staff not directly belonging to the parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cctv">
      <xs:annotation>
        <xs:documentation>CCTV (camera observation).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dog">
      <xs:annotation>
        <xs:documentation>Dog.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="guard24hours">
  <xs:annotation>
    <xs:documentation>24/24 guard.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lighting">
  <xs:annotation>
    <xs:documentation>Site is illuminated in a normal way (but not as strong as 'floodLight').</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="floodLight">
  <xs:annotation>
    <xs:documentation>Flood light (stronger than lighting).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fences">
  <xs:annotation>
    <xs:documentation>Fences.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="areaSeperatedFromSurroundings">
  <xs:annotation>
    <xs:documentation>Site is separated from its surroundings. Can also be used to express a space for noise-producing vehicles,
e.g. lorries with cooling generators.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>There are no security measures.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the values in this enumeration applies. Use 'parkingAdditionalSecurity'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSite" abstract="true">
  <xs:annotation>
    <xs:documentation>A record containing static details of a parking site. Must be specialised as an 'Urban-' or
'InterUrbanParkingSite' or a 'SpecialLocationParkingSite'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecord">
      <xs:sequence>
        <xs:element name="parkingReservation" type="D2LogicalModel:ReservationTypeEnum" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Indication of whether a parking reservation service is available and/or mandatory.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```



```

<xs:element name="parkingLayout" type="D2LogicalModel:ParkingLayoutEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Layout of the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="highestFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Highest floor of the parking site. It is possible to have negative values here in case it is underground only.
Must be higher or equal than 'lowestFloor'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="lowestFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Lowest floor of the parking site. Positive values may apply in case it is over ground only. Must be lower or
equal than 'highestFloor'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="temporaryParking" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Indicates that the parking site is on a temporary basis. It might close permanently within short notice or
might only be partial equipped. The physical parking possibilities might be provisional, too.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSiteAddress" type="D2LogicalModel:Contact" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Information about the parking site itself (address etc.). The 'GroupOfLocations' association must not be
used for this role.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="reservationService" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Reservation service (for end users). It is recommended to give URL and telephone.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingUsageScenario" type="D2LogicalModel:_ParkingSiteScenarioIndexParkingUsageScenario"
minOccurs="0" maxOccurs="unbounded" />
<xs:element name="openingTimes" type="D2LogicalModel:OpeningTimes" minOccurs="0" />
<xs:element name="parkingAccess" type="D2LogicalModel:ParkingAccess" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>An exit from the parking facility onto the road network from any parking space unless separate exits are
specified for assigned parking spaces, in which case this is an exit from only the principal parking spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStandardsAndSecurity" type="D2LogicalModel:ParkingStandardsAndSecurity" />
<xs:element name="parkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingSiteStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="spacesAvailable">
      <xs:annotation>
        <xs:documentation>Parking spaces are currently available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="almostFull">
  <xs:annotation>
    <xs:documentation>The parking site is almost full (as defined by its configuration parameters).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fullAtEntrance">
  <xs:annotation>
    <xs:documentation>The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing
VMS).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="full">
  <xs:annotation>
    <xs:documentation>The parking site is full (as defined by its configuration parameters).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The status of the parking site is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpace">
  <xs:annotation>
    <xs:documentation>A single parking space. It is possible to define the same parking space more than once with different
properties, e.g. when there is a different parking assignment for different times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSpaceBasics">
      <xs:sequence>
        <xs:element name="identicalToParkingSpace" type="D2LogicalModel:IndexReference" minOccurs="0"
maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Points to another instance of 'ParkingSpace', which is identical from a local point of view (i.e. which is the
same parking space). To be used when defining mixed parking areas (with using different time slots).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="location" type="D2LogicalModel:Location" minOccurs="0" />
        <xs:element name="parkingSpaceDimension" type="D2LogicalModel:Dimension" minOccurs="0">
          <xs:annotation>
            <xs:documentation>Dimension of the parking space (not all dimension attributes need to be provided). If the parking space is
not rectangular, its dimension is specified as the smallest rectangle fitting inside its shape.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSpaceExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingSpaceAccessibilityEnum">
  <xs:annotation>
    <xs:documentation>Easements for handicapped people especially related to a parking space or a group of parking
spaces.</xs:documentation>
  </xs:annotation>

```

```

</xs:annotation>
<xs:restriction base="xs:string">
  <xs:enumeration value="extraSpaceLeftSide">
    <xs:annotation>
      <xs:documentation>There is some extra space on the left side of the parking space (in parking direction point of view), for
example to improve the situation for wheelchair users.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="extraSpaceRightSide">
    <xs:annotation>
      <xs:documentation>There is some extra space on the right side of the parking space (in parking direction point of view), for
example to improve the situation for wheelchair users.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="nearbyPedestrianExit">
    <xs:annotation>
      <xs:documentation>The parking space is quite near to a pedestrian exit. Note: Can be more exactly defined by using
'dedicatedAccess'.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="bordersMarked">
    <xs:annotation>
      <xs:documentation>The border of the parking space is marked (painted on the ground).</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpaceBasics" abstract="true">
  <xs:annotation>
    <xs:documentation>Common properties of parking spaces and groups of parking spaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSpaceOrGroupIdentifier" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A public identifier or short description for the parking space or group of parking spaces, for example "6D" or
"Truck parking west".</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingFloorOrLevel" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The floor or level of the parking site on which the assigned parking spaces are located.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="accessibility" type="D2LogicalModel:AccessibilityEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Information on accessibility, easements and marking for handicapped people.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSpaceAccessibility" type="D2LogicalModel:ParkingSpaceAccessibilityEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Further easements for handicapped people related to this parking space or this group of parking
spaces.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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```

</xs:element>
<xs:element name="parkingSpacePhysics" type="D2LogicalModel:ParkingSpacePhysicsEnum" minOccurs="0" maxOccurs="2">
  <xs:annotation>
    <xs:documentation>Specifies 'driveThrough' or 'openAir' for the parking space or the group of parking
spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingMode" type="D2LogicalModel:ParkingModeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The arrangement of the parking space or the group of parking spaces in relation to the
road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingReservation" type="D2LogicalModel:ReservationTypeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Indication of whether a parking reservation service is available and/or mandatory.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="maximumParkingDuration" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The maximum parking duration for a parking record, a parking space or a group of parking spaces (e.g. to
avoid overnight parking).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="distanceFromPrimaryRoad" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the distance from the primary road in metres. Especially useful, if parking is located on a smaller
type of road.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancyDetectionType" type="D2LogicalModel:OccupancyDetectionTypeEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of parking occupancy detection for a parking record, a parking space or a group of parking spaces, if
any (balancing, single slot, ... ).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSecurity" type="D2LogicalModel:ParkingSecurityEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dedicatedAccess" type="D2LogicalModel:DedicatedAccess" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="onlyAssignedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Parking is only allowed for the assignment given in this class, i.e. other assignments are not allowed. By
using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of
attributes.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="assignedParkingAmongOthers" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Assignments for parking. Other assignments are allowed as well, i.e. the parking spaces are convenient for
this kind of assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="prohibitedParking" type="D2LogicalModel:ParkingAssignment" minOccurs="0">
  <xs:annotation>

```

```

    <xs:documentation>Parking is not allowed for the given assignment.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingEquipmentOrServiceFacility"
type="D2LogicalModel:_ParkingSpaceBasicsEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacility" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Equipment, services and szenarios, which are directly related to the assigned parking space or parking
space group. Note that the infrastructure index must be unique with respect to the Parking class' infrastrucure
indec</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingUsageScenario" type="D2LogicalModel:_ParkingSpaceBasicsScenarioIndexParkingUsageScenario"
minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingSpaceBasicsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingSpacePhysicsEnum">
  <xs:annotation>
    <xs:documentation>Specifies drive through and open air properties for the parking space or the group of parking
spaces.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="driveThrough">
      <xs:annotation>
        <xs:documentation>Entering as well as leaving the parking space can be done straight in the direction of
parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="openAir">
      <xs:annotation>
        <xs:documentation>There is no roof and not another storey on top of the parking space, which could prevent from rain, for
example.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingSpecialLocationEnum">
  <xs:annotation>
    <xs:documentation>Locations, often associated with a building, for a SpecialLocationParkingSite.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="airportTerminal">
      <xs:annotation>
        <xs:documentation>The parking site is associated with an airport terminal.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="exhibitonCentre">
      <xs:annotation>
        <xs:documentation>The parking site is associated with an exhibition centre.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shoppingCentre">
      <xs:annotation>
        <xs:documentation>The parking site is associated with a shopping centre.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="specificFacility">
      <xs:annotation>

```

<xs:documentation>The parking site is associated with a specific facility (e.g. a hospital, a tourist site, a garden centre, a park etc.).. Attribute "parkingOtherSpecialLocation" may be used to specify details.</xs:documentation>

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="trainStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a train station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="campground">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a campground.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="themePark">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a theme park.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ferryTerminal">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a ferry terminal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleOnRailTerminal">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a vehicle-to-rail terminal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="coachStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a coach station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="cableCarStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a cable car station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicTransportStation">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a public transport station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="market">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="religiousCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a religious centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="conventionCentre">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a convention centre.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

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<xs:enumeration value="cinema">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a cinema.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="skilift">
  <xs:annotation>
    <xs:documentation>The parking site is associated with a ski lift.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>The parking site is associated with some other location. Use "parkingOtherSpecialLocation" to specify
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingStandardsAndSecurity">
  <xs:annotation>
    <xs:documentation>Security measures and standards or standard-like categorization for a parking site.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="labelSecurityLevel" type="D2LogicalModel:LABELSecurityLevelEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Formal assessment for the security level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="labelServiceLevel" type="D2LogicalModel:LABELServiceLevelEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Formal assessment for the service level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="labelSecurityLevelSelfAssessment" type="D2LogicalModel:LABELSecurityLevelEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Self-assessment for the security level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="labelServiceLevelSelfAssessment" type="D2LogicalModel:LABELServiceLevelEnum" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Self-assessment for the service level defined by the LABEL project
http://truckparkinglabel.eu.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSecurity" type="D2LogicalModel:ParkingSecurityEnum" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies security measures related to the parking site or particular spaces.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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<xs:element name="parkingAdditionalSecurity" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Security equipment of the parking site that is not covered by the enumeration
'ParkingSecurityEnum'.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSupervision" type="D2LogicalModel:ParkingSupervisionEnum" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Defines the kind of supervision of the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSecurityNationalClassification" type="D2LogicalModel:MultilingualString" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A national classification of the parking security.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="certifiedSecureParking" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Presence of a certification for secure parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="dateOfCertification" type="D2LogicalModel:Date" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Date of certification.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStandardsAndSecurityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusColourMapping">
  <xs:annotation>
    <xs:documentation>Defines a pair of 'parkingSiteStatus' and a corresponding colour.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbColour" type="D2LogicalModel:RGBColour" />
    <xs:element name="parkingStatusColourMappingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingSupervisionEnum">
  <xs:annotation>
    <xs:documentation>Defines the kind of supervision of the parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="remote">
      <xs:annotation>
        <xs:documentation>Remote.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="onSite">
      <xs:annotation>
        <xs:documentation>On site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:annotation>
</xs:enumeration>
<xs:enumeration value="controlCentreOnSite">
  <xs:annotation>
    <xs:documentation>Control centre on site.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="controlCentreOffSite">
  <xs:annotation>
    <xs:documentation>Control centre off site.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="patrol">
  <xs:annotation>
    <xs:documentation>Patrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="none">
  <xs:annotation>
    <xs:documentation>None.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingTable">
  <xs:annotation>
    <xs:documentation>A collection of parking records, which can be parking sites or groups of parking sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingTableName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the parking table.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingTableVersionTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The date/time that this version of the parking table was defined by the supplier. The identity and version of
the table are defined by the class stereotype implementation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingRecord" type="D2LogicalModel:ParkingRecord" maxOccurs="unbounded" />
    <xs:element name="parkingTableExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="ParkingTablePublication">
  <xs:annotation>
    <xs:documentation>A publication defining one or more tables that have entries of parking sites or groups of them, located in an

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urban or interurban context.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="headerInformation" type="D2LogicalModel:HeaderInformation" minOccurs="0" />
  <xs:element name="parkingTable" type="D2LogicalModel:ParkingTable" maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingThresholds">
  <xs:annotation>
    <xs:documentation>Configuration parameters of the parking site, used among others for the dynamic attribute 'parkingStatus'.
This component or all elements of it can be overridden in the dynamic model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="almostFullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from
'almost full' to 'spaces available' as the parking site's occupancy decreases. Must be greater than 'almostFullIncreasing'
value.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="almostFullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the state of the site is considered to change from 'spaces
available' to 'almost full' as the site's occupancy increases. Must be lower or equal to 'almostFullDecreasing' and greater
'fullDecreasing'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="entranceFull" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g.
full sign is displayed at entrance or on managing VMS).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from 'full'
to 'almost full' as the site's occupancy decreases. Must be greater or equal to 'fullIncreasing' value and lower than
'almostFullIncreasing'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="fullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of available spaces below which the state of the parking site is considered to change from
'almost full' to 'full' as the site's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overcrowding" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vehicles on the parking above which the overcrowding state of the parking site is considered
to change to 'overcrowding'. Can be used as an alternative to the overcrowding level attributes.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overcrowdingLevel1" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'noOvercrowding' to 'overcrowdingLevel1'. Must be lower than the 'overcrowdingLevel2'
value.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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<xs:element name="overcrowdingLevel2" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
considered to change from 'overcrowdingLevel1' to 'overcrowdingLevel2'. Must be greater than the 'overcrowdingLevel1'
value.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingLastMaximumOccupancy" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The last known occupancy (number of parking vehicles on the site) under safe
conditions.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStatusColourMapping" type="D2LogicalModel:ParkingStatusColourMapping" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingThresholdsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingTypeOfGroup">
  <xs:annotation>
    <xs:documentation>The type of group specification (group of parking spaces).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="adjacentSpaces">
      <xs:annotation>
        <xs:documentation>A description of adjacent spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nonAdjacentSpaces">
      <xs:annotation>
        <xs:documentation>A description of non-adjacent spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="completeFloor">
      <xs:annotation>
        <xs:documentation>A description for a complete floor in a car park.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mixedUsage">
      <xs:annotation>
        <xs:documentation>A definition for mixed usage for this group (e.g. by time). This means there are more definitions for this
group or for sub- or supersets of it.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="statisticsOnly">
      <xs:annotation>
        <xs:documentation>This group provides statistical figures only, for example 60 spaces for lorries in total. Usually, this kind of
group does not use georeference information. It is not a complete description of parking spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="singleParameters">
      <xs:annotation>
        <xs:documentation>This group provides some single features for a selected number of spaces. For example, you can define all
spaces, where electric charging stations are provided. It is not a complete description of the parking spaces.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>

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    <xs:documentation>Some other kind of group.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingUsageScenario">
  <xs:annotation>
    <xs:documentation>A special type of usage available for the parking site or the group of parking spaces. In the
'ParkingStatusPublication', the operation type (in operation or not) can be defined.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingUsageScenario" type="D2LogicalModel:ParkingUsageScenarioEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A special type of usage available for the parking site or a group of parking spaces. In the
'ParkingStatusPublication', the operation type (in operation or not) can be defined.</xs:documentation>
      </xs:annotation>
      </xs:element>
      <xs:element name="truckParkingDynamicManagement" type="D2LogicalModel:TruckParkingDynamicManagementEnum"
minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>Two modes for parking lorries in a efficient way according to their departure times. May only be used for
parking scenario 'truckParking'.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="scenarioAvailability" type="D2LogicalModel:OverallPeriod" minOccurs="0" />
      <xs:element name="parkingUsageScenarioExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
<xs:simpleType name="ParkingUsageScenarioEnum">
  <xs:annotation>
    <xs:documentation>Types of parking usage (park & ride, kiss & ride, ...)</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="truckParking">
      <xs:annotation>
        <xs:documentation>The parking site is designed for lorries (other vehicles are allowed as well).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restArea">
      <xs:annotation>
        <xs:documentation>The parking site is associated with a rest area, i.e. people can relax some time outside their car there. Note
that the presence of some bench, picnic place or toilet is already sufficient; there is no need for a restaurant or a
building.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="serviceArea">
      <xs:annotation>
        <xs:documentation>The parking site is associated with a service area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="loadingBay">
      <xs:annotation>
        <xs:documentation>The parking site or space(s) are designed as a loading bay.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overnightParking">
      <xs:annotation>
        <xs:documentation>The parking site or space(s) are designed for overnight parking. Note that the absence of this scenario does

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not automatically mean a prohibition of overnight parking. See also PermitsAndProhibitions.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other usage scenario.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingVMS">
  <xs:annotation>
    <xs:documentation>A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the
parking site (e.g. to indicate to drivers the current availability of spaces).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="vmsUnitUsedToManageParking" type="D2LogicalModel:_VmsUnitRecordVersionedReference"
minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a record that contains the metadata for a specific VMS unit that may be used to manage the
parking site (e.g. to indicate to drivers the current availability of spaces).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vmsOperator" type="D2LogicalModel:Contact" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="parkingVMSExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:annotation>
    <xs:documentation>A payload publication of traffic related information or associated management information created at a specific
point in time that can be exchanged via a DATEX II interface.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="publicationTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date/time at which the payload publication was created.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicationCreator" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="payloadPublicationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language" use="required">
    <xs:annotation>
      <xs:documentation>The default language used throughout the payload publication.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:simpleType name="PaymentCardBrandsEnum">
  <xs:annotation>
    <xs:documentation>Brands of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="americanExpress">
      <xs:annotation>

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<xs:documentation>American Express</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="cirrus">
  <xs:annotation>
    <xs:documentation>Cirrus</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="dinersClub">
  <xs:annotation>
    <xs:documentation>Diners Club</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="discoverCard">
  <xs:annotation>
    <xs:documentation>Discover Card</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="giroCard">
  <xs:annotation>
    <xs:documentation>Girocard</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="maestro">
  <xs:annotation>
    <xs:documentation>Maestro</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="masterCard">
  <xs:annotation>
    <xs:documentation>MasterCard</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visa">
  <xs:annotation>
    <xs:documentation>Visa</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vPay">
  <xs:annotation>
    <xs:documentation>V PAY</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="PaymentCardTypesEnum">
  <xs:annotation>
    <xs:documentation>Types of payment cards.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="creditCard">
      <xs:annotation>
        <xs:documentation>Credit card</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
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</xs:enumeration>
<xs:enumeration value="debitCard">
  <xs:annotation>
    <xs:documentation>Debit card</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="chargeCard">
  <xs:annotation>
    <xs:documentation>Charge card</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fleetCard">
  <xs:annotation>
    <xs:documentation>Fleet or petrol station card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="storedValueCard">
  <xs:annotation>
    <xs:documentation>Stored value card / prepaid card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other type of card.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Percentage">
  <xs:annotation>
    <xs:documentation>A measure of percentage.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="PercentageDistanceAlongLinearElement">
  <xs:annotation>
    <xs:documentation>Distance of a point along a linear element measured from the start node expressed as a percentage of the
    whole length of the linear element, where start node is relative to the element definition rather than the direction of traffic
    flow.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="percentageDistanceAlong" type="D2LogicalModel:Percentage" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A measure of distance along a linear element from the start of the element expressed as a percentage of
            the total length of the linear object.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="percentageDistanceAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType"
        minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="Period">
  <xs:annotation>
    <xs:documentation>A continuous time period or a set of discontinuous time periods defined by the intersection of a set of criteria
    all within an overall delimiting interval.</xs:documentation>

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</xs:annotation>
<xs:sequence>
  <xs:element name="startOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Start of period.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="endOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>End of a period.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="periodName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The name of the period.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="recurringTimePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0"
maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A recurring period of a day.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="recurringDayWeekMonthPeriod" type="D2LogicalModel:DayWeekMonth" minOccurs="0"
maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A recurring period defined in terms of days of the week, weeks of the month and months of the year.
</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="periodExtension" type="D2LogicalModel:_PeriodExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodExtended">
  <xs:annotation>
    <xs:documentation>An extension point for Period offering the possibility to describe special days and public
holidays.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="recurringSpecialDay" type="D2LogicalModel:SpecialDay" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A recurring period in terms of special days.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PermitsAndProhibitions">
  <xs:annotation>
    <xs:documentation>Defines sets of action and regulations to specify permitted and prohibited issues.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="activity" type="D2LogicalModel:RestAreaActivityEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>An activity, which is regulated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="regulation" type="D2LogicalModel:RegulationEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Regulation for the specified activity.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

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    </xs:annotation>
  </xs:element>
  <xs:element name="permitsAndProhibitionsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="PermitTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of permission for parking.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="blueZonePermit">
      <xs:annotation>
        <xs:documentation>Blue zone permit.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="careTakingPermit">
      <xs:annotation>
        <xs:documentation>Permit for care taking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carpoolingPermit">
      <xs:annotation>
        <xs:documentation>A permit for vehicles used for carpooling.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carSharingPermit">
      <xs:annotation>
        <xs:documentation>A permit for car sharing vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="disabledPermit">
      <xs:annotation>
        <xs:documentation>Permit for disabled.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="emergencyVehiclePermit">
      <xs:annotation>
        <xs:documentation>Permit for emergency vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="employeePermit">
      <xs:annotation>
        <xs:documentation>Permit for employees.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fairPermit">
      <xs:annotation>
        <xs:documentation>Permit of a fair.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="governmentPermit">
      <xs:annotation>
        <xs:documentation>Vehicles that have an official parking permission from the appropriate (local)
government.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="maintenanceVehiclePermit">
      <xs:annotation>
        <xs:documentation>Permit for a maintenance vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="residentPermit">
  <xs:annotation>
    <xs:documentation>Permit for a resident.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadWorksPermit">
  <xs:annotation>
    <xs:documentation>Permit for road works.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="specificIdentifiedVehiclePermit">
  <xs:annotation>
    <xs:documentation>A specific identified vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="taxiPermit">
  <xs:annotation>
    <xs:documentation>Permit for a taxi.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other permit.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Point">
  <xs:annotation>
    <xs:documentation>A single geospatial point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NetworkLocation">
      <xs:sequence>
        <xs:element name="tpegPointLocation" type="D2LogicalModel:TpegPointLocation" minOccurs="0" />
        <xs:element name="alertCPPoint" type="D2LogicalModel:AlertCPPoint" minOccurs="0" />
        <xs:element name="pointAlongLinearElement" type="D2LogicalModel:PointAlongLinearElement" minOccurs="0" />
        <xs:element name="pointByCoordinates" type="D2LogicalModel:PointByCoordinates" minOccurs="0" />
        <xs:element name="pointExtension" type="D2LogicalModel:_PointExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="PointAlongLinearElement">
  <xs:annotation>
    <xs:documentation>A point on a linear element where the linear element is either a part of or the whole of a linear object (i.e. a road), consistent with ISO 19148 definitions. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="administrativeAreaOfPoint" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identification of the road administration area which contains the specified point.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="directionBoundAtPoint" type="D2LogicalModel:DirectionEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow at the specified point in terms of general destination

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```

direction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="directionRelativeAtPoint" type="D2LogicalModel:LinearReferencingDirectionEnum" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The direction of traffic flow at the specified point relative to the direction in which the linear element is
defined.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="heightGradeOfPoint" type="D2LogicalModel:HeightGradeEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Identification of whether the point on the linear element is at, above or below the normal elevation of a
linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade"
separation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="linearElement" type="D2LogicalModel:LinearElement" />
<xs:element name="distanceAlongLinearElement" type="D2LogicalModel:DistanceAlongLinearElement" />
<xs:element name="pointAlongLinearElementExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PointByCoordinates">
  <xs:annotation>
    <xs:documentation>A single point defined only by a coordinate set with an optional bearing direction.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="bearing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A bearing at the point measured in degrees (0 - 359). Unless otherwise specified the reference direction
corresponding to 0 degrees is North.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
    <xs:element name="pointByCoordinatesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PointCoordinates">
  <xs:annotation>
    <xs:documentation>A pair of coordinates defining the geodetic position of a single point using the European Terrestrial Reference
System 1989 (ETRS89).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="latitude" type="D2LogicalModel:Float" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Latitude in decimal degrees using the European Terrestrial Reference System 1989
(ETRS89).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="longitude" type="D2LogicalModel:Float" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Longitude in decimal degrees using the European Terrestrial Reference System 1989
(ETRS89).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinatesExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PointDestination">

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<xs:annotation>
  <xs:documentation>The specification of the destination of a defined route or itinerary which is a point.</xs:documentation>
</xs:annotation>
<xs:complexContent>
  <xs:extension base="D2LogicalModel:Destination">
    <xs:sequence>
      <xs:element name="point" type="D2LogicalModel:Point" />
      <xs:element name="pointDestinationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="PointExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'Point' to support the description of junctions (and other alternative point
descriptions).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="description" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Textual description for a point location</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="junction" type="D2LogicalModel:Junction" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PolygonArea">
  <xs:annotation>
    <xs:documentation>defines points for a closed polygon-shape describing the area</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="sectionName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Name of the polygon area. Especially useful when the area consists of more than one
polygon.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinates" type="D2LogicalModel:_PolygonAreaIndexPointCoordinates" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="polygonAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="PublicHoliday">
  <xs:annotation>
    <xs:documentation>Specification of the public holiday type in a specific country or region. Use this component only when
specialDayType is set to 'publicHoliday' or 'holidays'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="countrySubdivision" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-2 country sub-division code (up to 3 characters).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="region" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">

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<xs:annotation>
  <xs:documentation>Region of country (e.g. "Scotland", "Wales" etc. if country = GB) </xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="publicHolidayType" type="D2LogicalModel:PublicHolidayTypeEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the public holiday type for the country or region.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of public holiday, if the enumeration values do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicHolidayTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public holiday.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="betweenChristmasAndNewYear">
      <xs:annotation>
        <xs:documentation>The days between the Christmas and New Year public holidays which are not official public
holidays.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="boxingDay">
      <xs:annotation>
        <xs:documentation>The day following Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bridgeHoliday">
      <xs:annotation>
        <xs:documentation>A day between a public holiday and the weekend.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasEve">
      <xs:annotation>
        <xs:documentation>The day before Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasDayAndBoxingDay">
      <xs:annotation>
        <xs:documentation>Christmas day and Boxing day (day following Christmas day).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasHolidayPeriod">
      <xs:annotation>
        <xs:documentation>The period between the Christmas and New Year public holidays (inclusive).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dayFollowingPublicHoliday">
      <xs:annotation>
        <xs:documentation>A day following a public holiday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterFridayHoliday">

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```
<xs:annotation>
  <xs:documentation>Good Friday (the Friday prior to the Easter weekend).</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterHolidayPeriod">
  <xs:annotation>
    <xs:documentation>The period between Easter Friday and Easter Monday (inclusive).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterMondayHoliday">
  <xs:annotation>
    <xs:documentation>The Monday following the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSaturday">
  <xs:annotation>
    <xs:documentation>The Saturday of the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSunday">
  <xs:annotation>
    <xs:documentation>Easter Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eveOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>The day preceding a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidayPeriod">
  <xs:annotation>
    <xs:documentation>A holiday period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inLieuOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>A holiday in lieu of a public holiday that falls on a weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="january2ndHoliday">
  <xs:annotation>
    <xs:documentation>The 2nd of January holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsDay">
  <xs:annotation>
    <xs:documentation>New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsEve">
  <xs:annotation>
    <xs:documentation>The day before New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day that is not a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

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<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>A public holiday in the respective country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the elements in the list. Public holiday is specified by 'publicHolidayName'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Reference">
  <xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:complexType name="Referent">
  <xs:annotation>
    <xs:documentation>A referent on a linear object that has a known location such as a node, a reference marker (e.g. a
markerpost), an intersection etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="referentIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The identifier of the referent, unique on the specified linear element (i.e. road or part
of).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentName" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the referent, e.g. a junction or intersection name.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentType" type="D2LogicalModel:ReferentTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the referent.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="referentDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Description of the referent.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" minOccurs="0" />
    <xs:element name="referentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ReferentTypeEnum">
  <xs:annotation>
    <xs:documentation>A set of types of known points along a linear object such as a road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="boundary">
      <xs:annotation>
        <xs:documentation>A boundary between two jurisdictional or administrative areas. These may be legal boundaries such as
between counties or countries, maintenance responsibility boundaries or control boundaries. </xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="intersection">

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```
<xs:annotation>
  <xs:documentation>A crossing of two or more roads where the precise point of intersection is defined according to specific
business rules.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="referenceMarker">
  <xs:annotation>
    <xs:documentation>A marker which is usually but not necessarily physical that is one of a sequence which are spaced out
along the linear object (road) to provide a location reference. The spacing of markers is not necessarily even.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="landmark">
  <xs:annotation>
    <xs:documentation>A visible identifiable physical landmark either alongside or close to the linear object.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="roadNode">
  <xs:annotation>
    <xs:documentation>A topological node defined on a road network. Such nodes may delineate the segmentation of the road
network according to defined business rules or may constitute a purely topological representation of a road
network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="RegulationEnum">
  <xs:annotation>
    <xs:documentation>Regulation parameters for actions.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="permitted">
      <xs:annotation>
        <xs:documentation>Permitted.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="prohibited">
      <xs:annotation>
        <xs:documentation>Prohibited.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="punishable">
      <xs:annotation>
        <xs:documentation>The action is prohibited and can be punished.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seasonalHeterogeneous">
      <xs:annotation>
        <xs:documentation>It depends on the season, whether the action is allowed or not.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="permittedOnlyAtParticularTimes">
      <xs:annotation>
        <xs:documentation>Permitted only at particular times.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="permittedOnlyOnParticularAreas">
      <xs:annotation>
        <xs:documentation>Permitted only on particular areas (but inside the parking site ground).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```



```

</xs:enumeration>
<xs:enumeration value="prohibitedAtParticularTimes">
  <xs:annotation>
    <xs:documentation>Prohibited at particular times.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="prohibitedOnParticularAreas">
  <xs:annotation>
    <xs:documentation>Prohibited on particular areas.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyOnRequest">
  <xs:annotation>
    <xs:documentation>Only on request (i.e. permission needed).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heterogeneous">
  <xs:annotation>
    <xs:documentation>The regulation rule is quite complex and cannot be noted here.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyOutsideBuildings">
  <xs:annotation>
    <xs:documentation>Only outside buildings.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="onlyInsideBuildings">
  <xs:annotation>
    <xs:documentation>Only inside buildings.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>There is no regulation for this action.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The regulation is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ReservationTypeEnum">
  <xs:annotation>
    <xs:documentation>Reservation type enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="optional">
      <xs:annotation>
        <xs:documentation>Places can be reserved, but must not.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mandatory">

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```
<xs:annotation>
  <xs:documentation>Places need to be reserved.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="notAvailable">
  <xs:annotation>
    <xs:documentation>Places cannot be reserved.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="partly">
  <xs:annotation>
    <xs:documentation>Some places can or must be reserved, others not (do not use when specifying a single parking
space).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Possibility of reservation is unknown,</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unspecified">
  <xs:annotation>
    <xs:documentation>Possibility of reservation is not specified.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ResponseEnum">
  <xs:annotation>
    <xs:documentation>Types of response that a supplier can return to a requesting client.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="acknowledge">
      <xs:annotation>
        <xs:documentation>An acknowledgement that the supplier has received and complied with the client's
request.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="requestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="subscriptionRequestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a subscription.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="RestAreaActivityEnum">
  <xs:annotation>
    <xs:documentation>Rest area activity enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="openFire">
      <xs:annotation>
        <xs:documentation>Open fire.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
```

```

</xs:enumeration>
<xs:enumeration value="overnightParking">
  <xs:annotation>
    <xs:documentation>Overnight parking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="picnic">
  <xs:annotation>
    <xs:documentation>Picnic.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="smoking">
  <xs:annotation>
    <xs:documentation>Smoking.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="camping">
  <xs:annotation>
    <xs:documentation>Camping.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="handlingHazardousMaterial">
  <xs:annotation>
    <xs:documentation>Handling with hazardous material.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="barbecue">
  <xs:annotation>
    <xs:documentation>Barbeque.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="RGBColour">
  <xs:annotation>
    <xs:documentation>An RGB colour described by values for red, green and blue (0..255) as well as an optional
name.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="rgbRedValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The red value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbGreenValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The green value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbBlueValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The blue value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

<xs:element name="colourName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The name of the colour.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="rgbColourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="Road">
  <xs:annotation>
    <xs:documentation>Identification of a road by its name, identifier, type ...</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="nameOfRoad" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The name of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadIdentifier" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Identifier/number of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="typeOfRoad" type="D2LogicalModel:RoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Type of the road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadDestination" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Name of some city, area, compass direction or other identification the road is leading to (to determine the
direction in question).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadOrigination" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Name of some city, area, compass direction or other identification this road comes
from.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="distanceToThisRoad" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Distance to the road in metres (from the calling component/object).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="roadExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="RoadNode">
  <xs:annotation>
    <xs:documentation>A road node as part of the specialised road identified by the name of a junction on this
road.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Road">
      <xs:sequence>
        <xs:element name="junctionName" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Name of the junction.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:annotation>
  </xs:element>
  <xs:element name="roadNodeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="RoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Categorisation of the road type (motorway, main road, ...).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorway">
      <xs:annotation>
        <xs:documentation>Motorway.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="trunkRoad">
      <xs:annotation>
        <xs:documentation>Trunk road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="mainRoad">
      <xs:annotation>
        <xs:documentation>Main road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Seconds">
  <xs:annotation>
    <xs:documentation>Seconds.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="ServiceFacility">
  <xs:annotation>
    <xs:documentation>One type of service facility that is available on the parking site or located next to it. You can specify the number of this service facility type (e.g. 5 restaurants) as well as the number of subitems (e.g. 200 restaurant places).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingEquipmentOrServiceFacility">
      <xs:sequence>
        <xs:element name="serviceFacilityType" type="D2LogicalModel:ServiceFacilityTypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>One type of service, that is available on the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="numberOfSubitems" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The quantity of sub items to this service facility type, e.g. the total number of restaurant places or fuel dispensers etc.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

</xs:element>
<xs:element name="distanceFromParkingSite" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>If the service facility is not located on the parking site itself, its distance can be specified here in
metres.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="serviceFacilityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="ServiceFacilityTypeEnum">
  <xs:annotation>
    <xs:documentation>Service facilities available on the parking site, parking space or group of parking spaces. In distinction to
equipment, a service is mostly manned.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="hotel">
      <xs:annotation>
        <xs:documentation>A hotel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="motel">
      <xs:annotation>
        <xs:documentation>Hotel on the motorway or other accommodation service.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overnightAccommodation">
      <xs:annotation>
        <xs:documentation>OvernightAccommodation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="shop">
      <xs:annotation>
        <xs:documentation>A shop of unspecified kind.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="kiosk">
      <xs:annotation>
        <xs:documentation>Kiosk.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="foodShopping">
      <xs:annotation>
        <xs:documentation>Food shopping.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cafe">
      <xs:annotation>
        <xs:documentation>Cafe.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restaurant">
      <xs:annotation>
        <xs:documentation>Restaurant.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="restaurantSelfService">
  <xs:annotation>
    <xs:documentation>A restaurant where people arrange and fetch their meal themselves, this might enclose a
buffet.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorwayRestaurant">
  <xs:annotation>
    <xs:documentation>Restaurant located on a motorway rest area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorwayRestaurantSmall">
  <xs:annotation>
    <xs:documentation>Smaller type of restaurant located on a motorway rest area. Might be with limited
offers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sparePartsShopping">
  <xs:annotation>
    <xs:documentation>Spare parts shopping.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrolStation">
  <xs:annotation>
    <xs:documentation>Indicates whether it is possible to get petrol.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleMaintenance">
  <xs:annotation>
    <xs:documentation>Garage repair service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tyreRepair">
  <xs:annotation>
    <xs:documentation>A tyre repair service.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="truckRepair">
  <xs:annotation>
    <xs:documentation>Truck repair.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="truckWash">
  <xs:annotation>
    <xs:documentation>Truck wash.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWash">
  <xs:annotation>
    <xs:documentation>Car wash.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmacy">
  <xs:annotation>
    <xs:documentation>Pharmacy.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="medicalFacility">
  <xs:annotation>

```

```

    <xs:documentation>Medical facility.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="police">
  <xs:annotation>
    <xs:documentation>Indicates whether a police station is on site or very close.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="touristInformation">
  <xs:annotation>
    <xs:documentation>Tourist information with employees.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="bikeSharing">
  <xs:annotation>
    <xs:documentation>Bike Sharing.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="docstop">
  <xs:annotation>
    <xs:documentation>The site is part of the Docstop project, http://www.docstoponline.eu, which means medical assistance for
professional drivers.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="laundry">
  <xs:annotation>
    <xs:documentation>A possibility for washing clothes (might also be a laundromat with coins).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="leisureActivities">
  <xs:annotation>
    <xs:documentation>There are leisure activities offered on the site or in the very near surrounding. Use the additional description
attribute to give details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Some other service facility. Use 'otherEquipmentOrServiceFacility' to specify it.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="SpecialDay">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a
public holiday (country specific).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="intersectWithApplicableDays" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the period is the intersection of applicable days and this special day. When false, the period is
the union of applicable days and this special day.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```



```

<xs:element name="specialDayType" type="D2LogicalModel:SpecialDayTypeEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, .. </xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="specialDayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of a special day, if the enumeration values do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHoliday" type="D2LogicalModel:PublicHoliday" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="specialDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:annotation>
    <xs:documentation>Collection of general types of days.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="bicycleRaceDay">
      <xs:annotation>
        <xs:documentation>Day of local bicycle race.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bullFightDay">
      <xs:annotation>
        <xs:documentation>Day of local bullfight.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carnivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local carnival involving a procession along roads.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="exhibitionDay">
      <xs:annotation>
        <xs:documentation>Day of a local exhibition.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="festivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local festival.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="gamesDay">
      <xs:annotation>
        <xs:documentation>Day of local games (e.g. highland games in Scotland).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="horseRaceMeetingDay">
      <xs:annotation>
        <xs:documentation>Day of a local horse race meeting.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="huntMeetingDay">
      <xs:annotation>
        <xs:documentation>Day of a local hunt meeting.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
<xs:enumeration value="marathonRaceDay">
  <xs:annotation>
    <xs:documentation>Day of local marathon race.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marketDay">
  <xs:annotation>
    <xs:documentation>Day of a local market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local motor sport race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonWorkingDay">
  <xs:annotation>
    <xs:documentation>A non-working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local race meeting (other than horse or motor sport).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regattaDay">
  <xs:annotation>
    <xs:documentation>Day of a local regatta.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="showDay">
  <xs:annotation>
    <xs:documentation>Day of a local show.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sportsMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local sports meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="workingDay">
  <xs:annotation>
    <xs:documentation>A working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="schoolDay">
  <xs:annotation>
    <xs:documentation>School day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electionDay">
  <xs:annotation>
    <xs:documentation>Election day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>Public holiday.</xs:documentation>
  </xs:annotation>
</xs:annotation>
```

```

</xs:enumeration>
<xs:enumeration value="holidays">
  <xs:annotation>
    <xs:documentation>A day within the school holidays. You can use the PublicHoliday class to specify more
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefinedDayType">
  <xs:annotation>
    <xs:documentation>UndefinedDayType</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="SpecialLocationParkingSite">
  <xs:annotation>
    <xs:documentation>A parking site which is located at a special location, often associated with some building.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSite">
      <xs:sequence>
        <xs:element name="parkingSpecialLocation" type="D2LogicalModel:ParkingSpecialLocationEnum" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The special location of the parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingOtherSpecialLocation" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A special location not available in the enumeration. Use literal 'other' in this case.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="specialLocationParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="SquareMetres">
  <xs:annotation>
    <xs:documentation>Square metres.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:simpleType name="String">
  <xs:annotation>
    <xs:documentation>A character string whose value space is the set of finite-length sequences of characters. Every character has
a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">

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    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="SupplementaryPositionalDescription">
  <xs:annotation>
    <xs:documentation>A collection of supplementary positional information which improves the precision of the
location.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="locationDescriptor" type="D2LogicalModel:LocationDescriptorEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Specifies a descriptor which helps to identify the specific location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="sequentialRampNumber" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The sequential number of an exit/entrance ramp from a given location in a given direction (normally used to
indicate a specific exit/entrance in a complex junction/intersection).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="affectedCarriagewayAndLanes" type="D2LogicalModel:AffectedCarriagewayAndLanes" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="supplementaryPositionalDescriptionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="locationPrecision" type="D2LogicalModel:MetresAsNonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>Indicates that the location is given with a precision which is better than the stated value in
metres.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:complexType name="TariffsAndPayment">
  <xs:annotation>
    <xs:documentation>A table of charges under various conditions, primary used for parking. </xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="lastUpdated" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The date/time at which this information was last updated.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="acceptedMeansOfPayment" type="D2LogicalModel:MeansOfPaymentEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Method(s) by which the user can make payments. In case of 'paymentCard' use AcceptedPaymentCards to
specify more details.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="paymentMode" type="D2LogicalModel:ParkingPaymentModeEnum" minOccurs="0"
maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Modes how to realize the payment ('payAndDisplay', 'payByPrepaidToken', ...).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="paymentAdditionalDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Additional description, for instance instructions or telephone number for paying by
SMS.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

</xs:annotation>
</xs:element>
<xs:element name="freeOfCharge" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>No fee at all. In this case, no further elements of the tariffs structure are needed.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="reservationFee" type="D2LogicalModel:AmountOfMoney" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A fee for reservation, if this is uniform for all situations. Can also be 0 to indicate free reservations. This attribute does not indicate if reservation is available at all and/or mandatory.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="urlLinkAddress" type="D2LogicalModel:Uri" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="chargeBand" type="D2LogicalModel:ChargeBand" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="chargeBandByReference" type="D2LogicalModel:ChargeBandByReference" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="acceptedPaymentCards" type="D2LogicalModel:AcceptedPaymentCards" minOccurs="0" />
<xs:element name="tariffsAndPaymentExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="TemperatureCelsius">
  <xs:annotation>
    <xs:documentation>A measure of temperature defined in degrees Celsius.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="Time">
  <xs:annotation>
    <xs:documentation>An instant of time that recurs every day. The value space of time is the space of time of day values as defined in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:time" />
</xs:simpleType>
<xs:complexType name="TimePeriodByHour">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period within a 24 hour period by times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TimePeriodOfDay">
      <xs:sequence>
        <xs:element name="startTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Start of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>End of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="timePeriodByHourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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```

</xs:complexContent>
</xs:complexType>
<xs:complexType name="TimePeriodOfDay" abstract="true">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period of time within a 24 hour period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="timePeriodOfDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Tonnes">
  <xs:annotation>
    <xs:documentation>A measure of weight defined in metric tonnes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="TpegAreaDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing an area location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegDescriptor">
      <xs:sequence>
        <xs:element name="tpegAreaDescriptorType" type="D2LogicalModel:TpegLoc03AreaDescriptorSubtypeEnum" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
          </xs:element>
          <xs:element name="tpegAreaDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
<xs:complexType name="TpegAreaLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>A geographic or geometric area defined by a TPEG-Loc structure which may include height information for
additional geospatial discrimination.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegAreaLocationType" type="D2LogicalModel:TpegLoc01AreaLocationSubtypeEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of TPEG location.</xs:documentation>
      </xs:annotation>
      </xs:element>
      <xs:element name="tpegHeight" type="D2LogicalModel:TpegHeight" minOccurs="0" />
      <xs:element name="tpegAreaLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:complexType>
<xs:complexType name="TpegDescriptor" abstract="true">
  <xs:annotation>
    <xs:documentation>A collection of information providing descriptive references to locations using the TPEG-Loc location
referencing approach.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="descriptor" type="D2LogicalModel:MultilingualString" minOccurs="1" maxOccurs="1">
      <xs:annotation>

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    <xs:documentation>A text string which describes or elaborates the location.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tpegDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="TpegFramedPoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is framed between two other points on the same road.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointLocation">
      <xs:sequence>
        <xs:element name="tpegFramedPointLocationType" type="D2LogicalModel:TpegLoc01FramedPointLocationSubTypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of TPEG location.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="framedPoint" type="D2LogicalModel:TpegNonJunctionPoint">
          <xs:annotation>
            <xs:documentation>A single non junction point on the road network which is framed between two other specified points on
the road network.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="to" type="D2LogicalModel:TpegPoint">
          <xs:annotation>
            <xs:documentation>The location at the down stream end of the section of road which frames the
TPEGFramedPoint.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="from" type="D2LogicalModel:TpegPoint">
          <xs:annotation>
            <xs:documentation>The location at the up stream end of the section of road which frames the
TPEGFramedPoint.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegFramedPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegGeometricArea">
  <xs:annotation>
    <xs:documentation>A geometric area defined by a centre point and a radius.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegAreaLocation">
      <xs:sequence>
        <xs:element name="radius" type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The radius of the geometric area identified.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="centrePoint" type="D2LogicalModel:PointCoordinates">
          <xs:annotation>
            <xs:documentation>Centre point of a circular geometric area.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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<xs:element name="name" type="D2LogicalModel:TpegAreaDescriptor" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Name of area.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tpegGeometricAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexType>
<xs:complexType name="TpegHeight">
  <xs:annotation>
    <xs:documentation>Height information which provides additional discrimination for the applicable area.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="height" type="D2LogicalModel:MetresAsFloat" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A measurement of height in metres</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="heightType" type="D2LogicalModel:TpegLoc04HeightTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A descriptive identification of relative height using TPEG-Loc location referencing.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegHeightExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegIlcPointDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a junction by defining the intersecting roads.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegIlcPointDescriptorType" type="D2LogicalModel:TpegLoc03IlcPointDescriptorSubtypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegIlcPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegJunction">
  <xs:annotation>
    <xs:documentation>A point on the road network which is a road junction point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPoint">
      <xs:sequence>
        <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
        <xs:element name="name" type="D2LogicalModel:TpegJunctionPointDescriptor" minOccurs="0">
          <xs:annotation>
            <xs:documentation>A name which identifies a junction point on the road network</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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</xs:element>
<xs:element name="ilc" type="D2LogicalModel:TpegIlcPointDescriptor" maxOccurs="3">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a junction by identifying the intersecting roads at a road
junction.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="otherName" type="D2LogicalModel:TpegOtherPointDescriptor" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A descriptive name which helps to identify the junction point.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="tpegJunctionExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegJunctionPointDescriptor">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a point at a junction on a road network.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegJunctionPointDescriptorType"
type="D2LogicalModel:TpegLoc03JunctionPointDescriptorSubtypeEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegJunctionPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegLinearLocation">
  <xs:annotation>
    <xs:documentation>A linear section along a single road defined between two points on the same road by a TPEG-Loc
structure.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegDirection" type="D2LogicalModel:DirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegLinearLocationType" type="D2LogicalModel:TpegLoc01LinearLocationSubtypeEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of TPEG location.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="to" type="D2LogicalModel:TpegPoint">
      <xs:annotation>
        <xs:documentation>The location at the down stream end of the linear section of road.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="from" type="D2LogicalModel:TpegPoint">

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    <xs:annotation>
      <xs:documentation>The location at the up stream end of the linear section of road.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:sequence>
    <xs:element name="TpegLinearLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="TpegLoc01AreaLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of area.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="largeArea">
      <xs:annotation>
        <xs:documentation>A geographic or geometric large area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01FramedPointLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of points on the road network framed by two other points on the same road.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="framedPoint">
      <xs:annotation>
        <xs:documentation>A point on the road network framed by two other points on the same road.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01LinearLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of linear location.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="segment">
      <xs:annotation>
        <xs:documentation>A segment (or link) of the road network corresponding to the way in which the road operator has segmented
the network.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc01SimplePointLocationSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Types of simple point.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="intersection">
      <xs:annotation>
        <xs:documentation>An point on the road network at which one or more roads intersect.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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<xs:enumeration value="nonLinkedPoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is not at a junction or intersection.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03AreaDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing area locations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName">
      <xs:annotation>
        <xs:documentation>Name of an administrative area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="administrativeReferenceName">
      <xs:annotation>
        <xs:documentation>Reference name by which administrative area is known.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="areaName">
      <xs:annotation>
        <xs:documentation>Name of an area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="countyName">
      <xs:annotation>
        <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lakeName">
      <xs:annotation>
        <xs:documentation>Name of a lake.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="nationName">
      <xs:annotation>
        <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of a ISO recognised country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="policeForceControlAreaName">
      <xs:annotation>
        <xs:documentation>Name of a police force control area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="regionName">
      <xs:annotation>
        <xs:documentation>Name of a geographic region.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="seaName">
      <xs:annotation>
        <xs:documentation>Name of a sea.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="townName">
      <xs:annotation>

```

```

    <xs:documentation>Name of a town.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03IlcPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing a junction by identifying the intersecting roads at a road
junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="tpegIlcName1">
      <xs:annotation>
        <xs:documentation>The name of the road on which the junction point is located.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tpegIlcName2">
      <xs:annotation>
        <xs:documentation>The name of the first intersecting road at the junction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tpegIlcName3">
      <xs:annotation>
        <xs:documentation>The name of the second intersecting road (if one exists) at the junction.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03JunctionPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors for describing a point at a road junction.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="junctionName">
      <xs:annotation>
        <xs:documentation>Name of a road network junction where two or more roads join.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc03OtherPointDescriptorSubtypeEnum">
  <xs:annotation>
    <xs:documentation>Descriptors other than junction names and road descriptors which can help to identify the location of points on
the road network.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName">
      <xs:annotation>
        <xs:documentation>Name of an administrative area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="administrativeReferenceName">
      <xs:annotation>
        <xs:documentation>Reference name by which an administrative area is known.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="airportName">
  <xs:annotation>
    <xs:documentation>Name of an airport.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="areaName">
  <xs:annotation>
    <xs:documentation>Name of an area.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="buildingName">
  <xs:annotation>
    <xs:documentation>Name of a building.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="busStopIdentifier">
  <xs:annotation>
    <xs:documentation>Identifier of a bus stop on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="busStopName">
  <xs:annotation>
    <xs:documentation>Name of a bus stop on the road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="canalName">
  <xs:annotation>
    <xs:documentation>Name of a canal.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="countyName">
  <xs:annotation>
    <xs:documentation>Name of a county (administrative sub-division).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ferryPortName">
  <xs:annotation>
    <xs:documentation>Name of a ferry port.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="intersectionName">
  <xs:annotation>
    <xs:documentation>Name of a road network intersection.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lakeName">
  <xs:annotation>
    <xs:documentation>Name of a lake.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="linkName">
  <xs:annotation>
    <xs:documentation>Name of a road link.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="localLinkName">
  <xs:annotation>

```

```
<xs:documentation>Local name of a road link.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="metroStationName">
  <xs:annotation>
    <xs:documentation>Name of a metro/underground station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nationName">
  <xs:annotation>
    <xs:documentation>Name of a nation (e.g. Wales) which is a sub-division of a ISO recognised country.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonLinkedPointName">
  <xs:annotation>
    <xs:documentation>Name of a point on the road network which is not at a junction or intersection. </xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="parkingFacilityName">
  <xs:annotation>
    <xs:documentation>Name of a parking facility.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pointName">
  <xs:annotation>
    <xs:documentation>Name of a specific point.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pointOfInterestName">
  <xs:annotation>
    <xs:documentation>Name of a general point of interest.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="railwayStation">
  <xs:annotation>
    <xs:documentation>Name of a railway station.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regionName">
  <xs:annotation>
    <xs:documentation>Name of a geographic region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="riverName">
  <xs:annotation>
    <xs:documentation>Name of a river.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="seaName">
  <xs:annotation>
    <xs:documentation>Name of a sea.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="serviceAreaName">
  <xs:annotation>
    <xs:documentation>Name of a service area on a road network.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tidalRiverName">
```

```

<xs:annotation>
  <xs:documentation>Name of a river which is of a tidal nature.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="townName">
  <xs:annotation>
    <xs:documentation>Name of a town.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="TpegLoc04HeightTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of height.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="above">
      <xs:annotation>
        <xs:documentation>Height above specified location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aboveSeaLevel">
      <xs:annotation>
        <xs:documentation>Height above mean sea high water level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="aboveStreetLevel">
      <xs:annotation>
        <xs:documentation>Height above street level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="at">
      <xs:annotation>
        <xs:documentation>At height of specified location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atSeaLevel">
      <xs:annotation>
        <xs:documentation>At mean sea high water level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="atStreetLevel">
      <xs:annotation>
        <xs:documentation>At street level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="below">
      <xs:annotation>
        <xs:documentation>Height below specified location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="belowSeaLevel">
      <xs:annotation>
        <xs:documentation>Height below mean sea high water level.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="belowStreetLevel">
  <xs:annotation>
    <xs:documentation>Height below street level.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefined">
  <xs:annotation>
    <xs:documentation>Undefined height reference.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown height reference.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="TpegNamedOnlyArea">
  <xs:annotation>
    <xs:documentation>An area defined by a well-known name.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegAreaLocation">
      <xs:sequence>
        <xs:element name="name" type="D2LogicalModel:TpegAreaDescriptor" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>Name of area.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegNamedOnlyAreaExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegNonJunctionPoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is not a road junction point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPoint">
      <xs:sequence>
        <xs:element name="pointCoordinates" type="D2LogicalModel:PointCoordinates" />
        <xs:element name="name" type="D2LogicalModel:TpegOtherPointDescriptor" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>A descriptive name which helps to identify the non junction point. At least one descriptor must identify the
            road on which the point is located, i.e. must be of type 'linkName' or 'localLinkName'.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegNonJunctionPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>

```



```

</xs:complexType>
<xs:complexType name="TpegOtherPointDescriptor">
  <xs:annotation>
    <xs:documentation>General descriptor for describing a point.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegOtherPointDescriptorType" type="D2LogicalModel:TpegLoc03OtherPointDescriptorSubtypeEnum"
minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The nature of the descriptor used to define the location under consideration (derived from the TPEG Loc
table 03).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="tpegOtherPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegPoint" abstract="true">
  <xs:annotation>
    <xs:documentation>A point on the road network which is either a junction point or a non junction point.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegPointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegPointDescriptor" abstract="true">
  <xs:annotation>
    <xs:documentation>A descriptor for describing a point location.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegDescriptor">
      <xs:sequence>
        <xs:element name="tpegPointDescriptorExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TpegPointLocation" abstract="true">
  <xs:annotation>
    <xs:documentation>A single point on the road network defined by a TPEG-Loc structure and which has an associated direction of
traffic flow.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="tpegDirection" type="D2LogicalModel:DirectionEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The direction of traffic flow.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="tpegPointLocationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="TpegSimplePoint">
  <xs:annotation>
    <xs:documentation>A point on the road network which is not bounded by any other points on the road
network.</xs:documentation>
  </xs:annotation>

```

```

<xs:complexContent>
  <xs:extension base="D2LogicalModel:TpegPointLocation">
    <xs:sequence>
      <xs:element name="tpegSimplePointLocationType" type="D2LogicalModel:TpegLoc01SimplePointLocationSubtypeEnum"
minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The type of TPEG location.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="point" type="D2LogicalModel:TpegPoint">
        <xs:annotation>
          <xs:documentation>A single point defined by a coordinate set and TPEG descriptors.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="tpegSimplePointExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="TruckParkingDynamicManagementEnum">
  <xs:annotation>
    <xs:documentation>Dynamic parking mode enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="compactParking">
      <xs:annotation>
        <xs:documentation>Lorries are parking one after the other in different lanes; each lane has a dedicated time of departure (which
might be displayed on a sign gantry).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="queueParking">
      <xs:annotation>
        <xs:documentation>Lorries are parking in queues, one after the other. Each lorry must have an earlier time of departure than all
the lorries behind it.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noDynamicParkingManagement">
      <xs:annotation>
        <xs:documentation>No dynamic parking management.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Some other type of dynamic parking management.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="UrbanParkingSite">
  <xs:annotation>
    <xs:documentation>A parking site in an urban context.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingSite">
      <xs:sequence>
        <xs:element name="urbanParkingSiteType" type="D2LogicalModel:UrbanParkingSiteTypeEnum" minOccurs="1"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The type of urban parking site.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```

    </xs:annotation>
  </xs:element>
  <xs:element name="parkingZone" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Name or identifier of a parking zone this parking site belongs to. To be filled with the string value 'True', if
there is a parking zone with unknown name.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="urbanParkingSiteExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:simpleType name="UrbanParkingSiteTypeEnum">
  <xs:annotation>
    <xs:documentation>The type of an urban parking site.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="onStreetParking">
      <xs:annotation>
        <xs:documentation>Vehicles are parking on the roadside.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="offStreetParking">
      <xs:annotation>
        <xs:documentation>Vehicles are parking off the road, e.g. on a parking space, a car park or some other area designed for
parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>The parking is associated with some other location.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="UrgencyEnum">
  <xs:annotation>
    <xs:documentation>Degrees of urgency that a receiving client should associate with the disseminate of the information contained
in the publication.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="extremelyUrgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is extremely urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="urgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="normalUrgency">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is of normal urgency.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
<xs:simpleType name="Uri">
  <xs:annotation>
    <xs:documentation>A Uniform Resource Locator (URL) address comprising a compact string of characters for a resource
available on the Internet.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:anyURI" />
</xs:simpleType>
<xs:simpleType name="UserTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of users; used for parking but also for usage of equipment and services.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allUsers">
      <xs:annotation>
        <xs:documentation>All users.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="hotelGuests">
      <xs:annotation>
        <xs:documentation>Hotel guests.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="reservationHolders">
      <xs:annotation>
        <xs:documentation>Those who have a valid reservation for the duration of parking.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="registeredDisabledUsers">
      <xs:annotation>
        <xs:documentation>Registered disabled persons.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="disabled">
      <xs:annotation>
        <xs:documentation>Physically impaired people.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="handicapped">
      <xs:annotation>
        <xs:documentation>Persons with deficiencies in their daily life.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="hearingImpaired">
      <xs:annotation>
        <xs:documentation>People with difficulties to hear.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="visuallyImpaired">
      <xs:annotation>
        <xs:documentation>People with difficulties to see.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wheelchairUsers">
      <xs:annotation>
        <xs:documentation>Wheelchair users.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="men">
      <xs:annotation>
```

```

    <xs:documentation>Men.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="women">
  <xs:annotation>
    <xs:documentation>Women.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="staff">
  <xs:annotation>
    <xs:documentation>Staff.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="employees">
  <xs:annotation>
    <xs:documentation>Employees.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="visitors">
  <xs:annotation>
    <xs:documentation>Visitors.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="overnightParker">
  <xs:annotation>
    <xs:documentation>Overnight parker.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Validity">
  <xs:annotation>
    <xs:documentation>Specification of validity, either explicitly or by a validity time period specification which may be
discontinuous.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="validityStatus" type="D2LogicalModel:ValidityStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of validity, either explicitly overriding the validity time specification or confirming
it.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overrunning" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The activity or action described by the SituationRecord is still in progress, overrunning its planned duration
as indicated in a previous version of this record.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validityTimeSpecification" type="D2LogicalModel:OverallPeriod">

```

```

<xs:annotation>
  <xs:documentation>A specification of periods of validity defined by overall bounding start and end times and the possible
intersection of valid periods with exception periods (exception periods overriding valid periods).</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="validityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ValidityStatusEnum">
  <xs:annotation>
    <xs:documentation>Values of validity status that can be assigned to a described event, action or item.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="active">
      <xs:annotation>
        <xs:documentation>The described event, action or item is currently active regardless of the definition of the validity time
specification.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="suspended">
      <xs:annotation>
        <xs:documentation>The described event, action or item is currently suspended, that is inactive, regardless of the definition of
the validity time specification.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="definedByValidityTimeSpec">
      <xs:annotation>
        <xs:documentation>The validity status of the described event, action or item is in accordance with the definition of the validity
time specification.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleCharacteristics">
  <xs:annotation>
    <xs:documentation>The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="fuelType" type="D2LogicalModel:FuelTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of fuel used by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType" type="D2LogicalModel:LoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of load carried by the vehicle, especially in respect of hazardous loads.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleEquipment" type="D2LogicalModel:VehicleEquipmentEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of equipment in use or on board the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType" type="D2LogicalModel:VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Vehicle type.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristic" type="D2LogicalModel:GrossWeightCharacteristic" minOccurs="0"

```

```

maxOccurs="2" />
  <xs:element name="heightCharacteristic" type="D2LogicalModel:HeightCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="lengthCharacteristic" type="D2LogicalModel:LengthCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="widthCharacteristic" type="D2LogicalModel:WidthCharacteristic" minOccurs="0" maxOccurs="2" />
  <xs:element name="heaviestAxleWeightCharacteristic" type="D2LogicalModel:HeaviestAxleWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
  <xs:element name="numberOfAxlesCharacteristic" type="D2LogicalModel:NumberOfAxlesCharacteristic" minOccurs="0"
maxOccurs="2" />
  <xs:element name="vehicleCharacteristicsExtension" type="D2LogicalModel:_VehicleCharacteristicsExtensionType"
minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCharacteristicsExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel
types, load types etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="loadType2" type="D2LogicalModel:LoadType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Loads currently not supported in 'LoadTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType2" type="D2LogicalModel:VehicleType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Vehicle types currently not supported in 'VehicleTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="VehicleEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle equipment in use or on board.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="notUsingSnowChains">
      <xs:annotation>
        <xs:documentation>Vehicle not using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notUsingSnowChainsOrTyres">
      <xs:annotation>
        <xs:documentation>Vehicle not using either snow tyres or snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowChainsInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowTyresInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="snowChainsOrTyresInUse">
      <xs:annotation>
        <xs:documentation>Vehicle using snow tyres or snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="withoutSnowTyresOrChainsOnBoard">
  <xs:annotation>
    <xs:documentation>Vehicle which is not carrying on board snow tyres or chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleType2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle types which are currently not supported in vehicleType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorhome">
      <xs:annotation>
        <xs:documentation>Motorhome</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Light goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="minibus">
      <xs:annotation>
        <xs:documentation>Minibus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="smallCar">
      <xs:annotation>
        <xs:documentation>Small car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="largeCar">
      <xs:annotation>
        <xs:documentation>Large car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicleWithTrailer">
      <xs:annotation>
        <xs:documentation>Light goods vehicle with trailer</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicleWithTrailer">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle with trailer</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyHaulageVehicle">
      <xs:annotation>
        <xs:documentation>Heavy-haulage vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="passengerCar">
```



```

<xs:annotation>
  <xs:documentation>Passenger car</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anyVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle of any type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="articulatedVehicle">
      <xs:annotation>
        <xs:documentation>Articulated vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>Bicycle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bus">
      <xs:annotation>
        <xs:documentation>Bus.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="car">
      <xs:annotation>
        <xs:documentation>Car.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="caravan">
      <xs:annotation>
        <xs:documentation>Caravan.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carOrLightVehicle">
      <xs:annotation>
        <xs:documentation>Car or light vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carWithCaravan">
      <xs:annotation>
        <xs:documentation>Car towing a caravan.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithTrailer">
  <xs:annotation>
    <xs:documentation>Car towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="constructionOrMaintenanceVehicle">
  <xs:annotation>
    <xs:documentation>Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry
mounted crane etc.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fourWheelDrive">
  <xs:annotation>
    <xs:documentation>Four wheel drive vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="highSidedVehicle">
  <xs:annotation>
    <xs:documentation>High sided vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lorry">
  <xs:annotation>
    <xs:documentation>Lorry of any type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="moped">
  <xs:annotation>
    <xs:documentation>Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by
normally having pedals).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycle">
  <xs:annotation>
    <xs:documentation>Motorcycle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycleWithSideCar">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle comprising a motorcycle with an attached side car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorscooter">
  <xs:annotation>
    <xs:documentation>Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter
wheels).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tanker">
  <xs:annotation>
    <xs:documentation>Vehicle with large tank for carrying bulk liquids.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="threeWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:enumeration>
<xs:enumeration value="trailer">
  <xs:annotation>
    <xs:documentation>Trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tram">
  <xs:annotation>
    <xs:documentation>Tram.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="twoWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Two wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="van">
  <xs:annotation>
    <xs:documentation>Van.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle with catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithoutCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle without catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCaravan">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withEvenNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with even numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withOddNumberedRegistrationPlates">
  <xs:annotation>
    <xs:documentation>Vehicle with odd numbered registration plate.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VersionedReference">

```

```

<xs:attribute name="id" type="xs:string" use="required" />
<xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="Volt">
  <xs:annotation>
    <xs:documentation>Volt.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="WeekOfMonthEnum">
  <xs:annotation>
    <xs:documentation>Weeks of the month.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeekOfMonth">
      <xs:annotation>
        <xs:documentation>First week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="secondWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Second week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thirdWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Third week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fourthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fourth week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fifthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fifth week of the month (at most only 3 days and non in February when not a leap year).
</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="WidthCharacteristic">
  <xs:annotation>
    <xs:documentation>Width characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The maximum width of an individual vehicle, in metres.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="widthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>

```

```
</xs:complexType>
</xs:schema>
```

### I.3 Schema for Parking Status Publication (DATEX II Truck Parking profile)

```
<?xml version="1.0" encoding="utf-8" standalone="no"?>
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
xmlns:D2LogicalModel="http://datex2.eu/schema/2/2_0" version="2.3" targetNamespace="http://datex2.eu/schema/2/2_0"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="_ExtensionType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_GenericPublicationExtensionType">
    <xs:sequence>
      <xs:element name="parkingStatusPublication" type="D2LogicalModel:ParkingStatusPublication" minOccurs="0" />
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="_MeasurementSiteRecordVersionedReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:VersionedReference">
        <xs:attribute name="targetClass" use="required" fixed="MeasurementSiteRecord" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ParkingAccessReference">
    <xs:complexContent>
      <xs:extension base="D2LogicalModel:Reference">
        <xs:attribute name="targetClass" use="required" fixed="ParkingAccess" />
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacilityStatus">
    <xs:sequence>
      <xs:element name="parkingEquipmentOrServiceFacilityStatus" type="D2LogicalModel:ParkingEquipmentOrServiceFacilityStatus"
minOccurs="1" maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="equipmentOrServiceFacilityIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusGroupIndexGroupOfParkingSpacesStatus">
    <xs:sequence>
      <xs:element name="groupOfParkingSpacesStatus" type="D2LogicalModel:GroupOfParkingSpacesStatus" minOccurs="1"
maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="groupIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusParkingSpaceIndexParkingSpaceStatus">
    <xs:sequence>
      <xs:element name="parkingSpaceStatus" type="D2LogicalModel:ParkingSpaceStatus" minOccurs="1" maxOccurs="1" />
    </xs:sequence>
    <xs:attribute name="parkingSpaceIndex" type="xs:int" use="required" />
  </xs:complexType>
  <xs:complexType name="_ParkingRecordStatusScenarioIndexParkingUsageScenarioStatus">
    <xs:sequence>
      <xs:element name="parkingUsageScenarioStatus" type="D2LogicalModel:ParkingUsageScenarioStatus" minOccurs="1"
maxOccurs="1" />
    </xs:sequence>
  </xs:complexType>
```

```

<xs:attribute name="scenarioIndex" type="xs:int" use="required" />
</xs:complexType>
<xs:complexType name="_ParkingRecordVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRecord" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingRouteDetailsVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingRouteDetails" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_ParkingTableVersionedReference">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:VersionedReference">
      <xs:attribute name="targetClass" use="required" fixed="ParkingTable" />
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="_PeriodExtensionType">
  <xs:sequence>
    <xs:element name="periodExtended" type="D2LogicalModel:PeriodExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="_VehicleCharacteristicsExtensionType">
  <xs:sequence>
    <xs:element name="vehicleCharacteristicsExtended" type="D2LogicalModel:VehicleCharacteristicsExtended" minOccurs="0" />
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="AreaOfInterestEnum">
  <xs:annotation>
    <xs:documentation>Types of areas of interest.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="continentWide">
      <xs:annotation>
        <xs:documentation>Area of the whole European continent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="national">
      <xs:annotation>
        <xs:documentation>Whole area of the specific country.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="neighbouringCountries">
      <xs:annotation>
        <xs:documentation>Area of countries which are neighbouring the one specified.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notSpecified">
      <xs:annotation>
        <xs:documentation>Non specified area.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="regional">
  <xs:annotation>
    <xs:documentation>Area of the local region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="Boolean">
  <xs:annotation>
    <xs:documentation>Boolean has the value space required to support the mathematical concept of binary-valued logic: {true,
false}. </xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:boolean" />
</xs:simpleType>
<xs:simpleType name="ComparisonOperatorEnum">
  <xs:annotation>
    <xs:documentation>Logical comparison operations.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="equalTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="greaterThanOrEqualTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "greater than or equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "less than".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThanOrEqualTo">
      <xs:annotation>
        <xs:documentation>Logical comparison operator of "less than or equal to".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="ComputationMethodEnum">
  <xs:annotation>
    <xs:documentation>Types of computational methods used in deriving data values for data sets.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="arithmeticAverageOfSamplesBasedOnAFixedNumberOfSamples">
      <xs:annotation>
        <xs:documentation>Arithmetic average of sample values based on a fixed number of samples.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="arithmeticAverageOfSamplesInATimePeriod">
      <xs:annotation>

```

```

    <xs:documentation>Arithmetic average of sample values in a time period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="harmonicAverageOfSamplesInATimePeriod">
  <xs:annotation>
    <xs:documentation>Harmonic average of sample values in a time period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="medianOfSamplesInATimePeriod">
  <xs:annotation>
    <xs:documentation>Median of sample values taken over a time period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="movingAverageOfSamples">
  <xs:annotation>
    <xs:documentation>Moving average of sample values.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ConfidentialityValueEnum">
  <xs:annotation>
    <xs:documentation>Values of confidentiality.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="internalUse">
      <xs:annotation>
        <xs:documentation>For internal use only of the recipient organisation.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noRestriction">
      <xs:annotation>
        <xs:documentation>No restriction on usage.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthorities">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesAndTrafficOperators">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities and traffic operators.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndPublishers">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators and publishers (service
providers).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="restrictedToAuthoritiesTrafficOperatorsAndVms">
      <xs:annotation>
        <xs:documentation>Restricted for use only by authorities, traffic operators, publishers (service providers) and variable message
signs.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```



```

<xs:simpleType name="CountryEnum">
  <xs:annotation>
    <xs:documentation>List of countries.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="at">
      <xs:annotation>
        <xs:documentation>Austria</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="be">
      <xs:annotation>
        <xs:documentation>Belgium</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bg">
      <xs:annotation>
        <xs:documentation>Bulgaria</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ch">
      <xs:annotation>
        <xs:documentation>Switzerland</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cs">
      <xs:annotation>
        <xs:documentation>Serbia and Montenegro</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cy">
      <xs:annotation>
        <xs:documentation>Cyprus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="cz">
      <xs:annotation>
        <xs:documentation>Czech Republic</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="de">
      <xs:annotation>
        <xs:documentation>Germany</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dk">
      <xs:annotation>
        <xs:documentation>Denmark</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ee">
      <xs:annotation>
        <xs:documentation>Estonia</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="es">
      <xs:annotation>
        <xs:documentation>Spain</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="fi">
  <xs:annotation>
    <xs:documentation>Finland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fo">
  <xs:annotation>
    <xs:documentation>Faroe Islands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fr">
  <xs:annotation>
    <xs:documentation>France</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gb">
  <xs:annotation>
    <xs:documentation>Great Britain</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gg">
  <xs:annotation>
    <xs:documentation>Guernsey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gi">
  <xs:annotation>
    <xs:documentation>Gibraltar</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gr">
  <xs:annotation>
    <xs:documentation>Greece</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hr">
  <xs:annotation>
    <xs:documentation>Croatia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="hu">
  <xs:annotation>
    <xs:documentation>Hungary</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ie">
  <xs:annotation>
    <xs:documentation>Ireland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="im">
  <xs:annotation>
    <xs:documentation>Isle Of Man</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="is">
  <xs:annotation>
    <xs:documentation>Iceland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="it">
  <xs:annotation>
    <xs:documentation>Italy</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="je">
  <xs:annotation>
    <xs:documentation>Jersey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="li">
  <xs:annotation>
    <xs:documentation>Lichtenstein</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lt">
  <xs:annotation>
    <xs:documentation>Lithuania</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lu">
  <xs:annotation>
    <xs:documentation>Luxembourg</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lv">
  <xs:annotation>
    <xs:documentation>Latvia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ma">
  <xs:annotation>
    <xs:documentation>Morocco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mc">
  <xs:annotation>
    <xs:documentation>Monaco</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mk">
  <xs:annotation>
    <xs:documentation>Macedonia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="mt">
  <xs:annotation>
    <xs:documentation>Malta</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nl">
  <xs:annotation>
    <xs:documentation>Netherlands</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="no">
  <xs:annotation>

```

```

    <xs:documentation>Norway</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pl">
  <xs:annotation>
    <xs:documentation>Poland</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="pt">
  <xs:annotation>
    <xs:documentation>Portugal</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ro">
  <xs:annotation>
    <xs:documentation>Romania</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="se">
  <xs:annotation>
    <xs:documentation>Sweden</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="si">
  <xs:annotation>
    <xs:documentation>Slovenia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sk">
  <xs:annotation>
    <xs:documentation>Slovakia</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="sm">
  <xs:annotation>
    <xs:documentation>San Marino</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tr">
  <xs:annotation>
    <xs:documentation>Turkey</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="va">
  <xs:annotation>
    <xs:documentation>Vatican City State</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:element name="d2LogicalModel" type="D2LogicalModel:D2LogicalModel" />
<xs:complexType name="D2LogicalModel">
  <xs:annotation>
    <xs:documentation>The DATEX II logical model comprising exchange, content payload and management sub-

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models.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="exchange" type="D2LogicalModel:Exchange" />
  <xs:element name="payloadPublication" type="D2LogicalModel:PayloadPublication" minOccurs="0" />
  <xs:element name="d2LogicalModelExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
<xs:attribute name="modelBaseVersion" use="required" fixed="2" />
</xs:complexType>
<xs:complexType name="DataValue" abstract="true">
  <xs:annotation>
    <xs:documentation>A data value of something that can be measured or calculated. Any provided meta-data values specified in the
attributes override any specified generic characteristics such as defined for a specific measurement in the MeasurementSiteTable.
</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="dataError" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indication of whether the value is deemed to be erroneous by the supplier, (true = erroneous). If not present
the data value is assumed to be ok. This may be used when automatic fault detection information relating to sensors is
available.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="reasonForDataError" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The reason why the value is deemed to be erroneous by the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dataValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="accuracy" type="D2LogicalModel:Percentage" use="optional">
    <xs:annotation>
      <xs:documentation>The extent to which the value is expected to be free from error, measured as a percentage of the data value.
100% means fully accurate.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="computationalMethod" type="D2LogicalModel:ComputationMethodEnum" use="optional">
    <xs:annotation>
      <xs:documentation>Method of computation which has been used to compute this data value.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="numberOfIncompleteInputs" type="D2LogicalModel:NonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>The number of inputs detected but not completed during the sampling or measurement period; e.g. vehicles
detected entering but not exiting the detection zone.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="numberOfInputValuesUsed" type="D2LogicalModel:NonNegativeInteger" use="optional">
    <xs:annotation>
      <xs:documentation>The number of input values used in the sampling or measurement period to determine the data
value.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
  <xs:attribute name="smoothingFactor" type="D2LogicalModel:Float" use="optional">
    <xs:annotation>
      <xs:documentation>Coefficient required when a moving average is computed to give specific weights to the former average and
the new data. A typical formula is, F being the smoothing factor: New average = (old average) F + (new data) (1 -
F).</xs:documentation>
    </xs:annotation>
  </xs:attribute>

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</xs:attribute>
<xs:attribute name="standardDeviation" type="D2LogicalModel:Float" use="optional">
  <xs:annotation>
    <xs:documentation>The standard deviation of the sample of input values from which this value was derived, measured in the
units of the data value. </xs:documentation>
  </xs:annotation>
</xs:attribute>
<xs:attribute name="supplierCalculatedDataQuality" type="D2LogicalModel:Percentage" use="optional">
  <xs:annotation>
    <xs:documentation>A measure of data quality assigned to the value by the supplier. 100% equates to ideal/perfect quality. The
method of calculation is supplier specific and needs to be agreed between supplier and client.</xs:documentation>
  </xs:annotation>
</xs:attribute>
</xs:complexType>
<xs:simpleType name="DateTime">
  <xs:annotation>
    <xs:documentation>A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property
and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from
UTC.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:dateTime" />
</xs:simpleType>
<xs:simpleType name="DayEnum">
  <xs:annotation>
    <xs:documentation>Days of the week.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="monday">
      <xs:annotation>
        <xs:documentation>Monday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="tuesday">
      <xs:annotation>
        <xs:documentation>Tuesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="wednesday">
      <xs:annotation>
        <xs:documentation>Wednesday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thursday">
      <xs:annotation>
        <xs:documentation>Thursday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="friday">
      <xs:annotation>
        <xs:documentation>Friday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="saturday">
      <xs:annotation>
        <xs:documentation>Saturday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="sunday">
      <xs:annotation>
```

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    <xs:documentation>Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="DayWeekMonth">
  <xs:annotation>
    <xs:documentation>Specification of periods defined by the intersection of days, weeks and months.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="applicableDay" type="D2LogicalModel:DayEnum" minOccurs="0" maxOccurs="7">
      <xs:annotation>
        <xs:documentation>Applicable day of the week. "All days of the week" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableWeek" type="D2LogicalModel:WeekOfMonthEnum" minOccurs="0" maxOccurs="5">
      <xs:annotation>
        <xs:documentation>Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="applicableMonth" type="D2LogicalModel:MonthOfYearEnum" minOccurs="0" maxOccurs="12">
      <xs:annotation>
        <xs:documentation>Applicable month of the year. "All months of the year" is expressed by non-inclusion of this
attribute.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dayWeekMonthExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="Exchange">
  <xs:annotation>
    <xs:documentation>Details associated with the management of the exchange between the supplier and the
client.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="keepAlive" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indicator that this exchange is due to "keep alive" functionality.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="response" type="D2LogicalModel:ResponseEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of the response that the supplier is returning to the requesting client.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="subscriptionReference" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Unique identifier of the client's subscription with the supplier.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="supplierIdentification" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="exchangeExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Float">
  <xs:annotation>
    <xs:documentation>A floating point number whose value space consists of the values  $m \times 2^e$ , where m is an integer whose

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absolute value is less than  $2^{24}$ , and e is an integer between -149 and 104, inclusive. </xs:documentation>

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</xs:annotation>
<xs:restriction base="xs:float" />
</xs:simpleType>
<xs:simpleType name="FuelTypeEnum">
  <xs:annotation>
    <xs:documentation>Type of fuel used by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="battery">
      <xs:annotation>
        <xs:documentation>Battery.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="biodiesel">
      <xs:annotation>
        <xs:documentation>Biodiesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="diesel">
      <xs:annotation>
        <xs:documentation>Diesel.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dieselBatteryHybrid">
      <xs:annotation>
        <xs:documentation>Diesel and battery hybrid.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ethanol">
      <xs:annotation>
        <xs:documentation>Ethanol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="hydrogen">
      <xs:annotation>
        <xs:documentation>Hydrogen.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="liquidGas">
      <xs:annotation>
        <xs:documentation>Liquid gas of any type including LPG.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lpg">
      <xs:annotation>
        <xs:documentation>Liquid petroleum gas.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="methane">
      <xs:annotation>
        <xs:documentation>Methane gas.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="petrol">
      <xs:annotation>
        <xs:documentation>Petrol.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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<xs:enumeration value="petrolBatteryHybrid">
  <xs:annotation>
    <xs:documentation>Petrol and battery hybrid.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="GenericPublication">
  <xs:annotation>
    <xs:documentation>A publication used to make level B extensions at the publication level.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">
      <xs:sequence>
        <xs:element name="genericPublicationName" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The name of the generic publication.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="genericPublicationExtension" type="D2LogicalModel:_GenericPublicationExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="GrossWeightCharacteristic">
  <xs:annotation>
    <xs:documentation>Gross weight characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossVehicleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The gross weight of the vehicle and its load, including any trailers.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="GroupOfParkingSitesStatus">
  <xs:annotation>
    <xs:documentation>Dynamic status information for the static object 'GroupOfParkingSites'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecordStatus">
      <xs:sequence>
        <xs:element name="groupOfParkingSitesStatus" type="D2LogicalModel:GroupOfParkingSitesStatusEnum" minOccurs="0"
maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The status of the group of parking sites (available spaces or not).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfParkingSitesStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>

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</xs:complexType>
<xs:simpleType name="GroupOfParkingSitesStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the group of parking sites (available spaces or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="allParkingsFull">
      <xs:annotation>
        <xs:documentation>All parkings within the group are full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="multiStoreyParkingsFull">
      <xs:annotation>
        <xs:documentation>All multi storey parkings within the group are full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noMoreParkingSpacesAvailable">
      <xs:annotation>
        <xs:documentation>No more parking spaces available within the group.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="enoughSpacesAvailable">
      <xs:annotation>
        <xs:documentation>Enough spaces available within the group.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The status of the group of parking sites is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="GroupOfParkingSpacesStatus">
  <xs:annotation>
    <xs:documentation>The status of the assigned parking spaces in the specified parking site, i.e. the status of those spaces assigned for particular types of person or vehicle and/or for specific duration types (e.g. short stay).</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingOccupancy">
      <xs:sequence>
        <xs:element name="groupDeclarationValidNow" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Override validity of AssignedParkingSpaces: True = Parking space declaration is valid now; False = Parking space declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is valid).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="groupOfParkingSpacesClosed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>True: The group of parking spaces is closed / not accessible. False or omitted: The group of parking spaces is accessible. This is no statement about its occupation.</xs:documentation>
          </xs:annotation>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

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        <xs:element name="groupOfParkingSpacesStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="HeaderInformation">
    <xs:annotation>
        <xs:documentation>Management information relating to the data contained within a publication.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element name="areaOfInterest" type="D2LogicalModel:AreaOfInterestEnum" minOccurs="0" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>The extent of the geographic area to which the related information should be
distributed.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="confidentiality" type="D2LogicalModel:ConfidentialityValueEnum" minOccurs="1" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>The extent to which the related information may be circulated, according to the recipient type. Recipients
must comply with this confidentiality statement.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="informationStatus" type="D2LogicalModel:InformationStatusEnum" minOccurs="1" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>The status of the related information (real, test, exercise ....).</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="urgency" type="D2LogicalModel:UrgencyEnum" minOccurs="0" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>This indicates the urgency with which a message recipient or Client should distribute the enclosed
information. Urgency particularly relates to functions within RDS-TMC applications. </xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="headerInformationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="HeaviestAxleWeightCharacteristic">
    <xs:annotation>
        <xs:documentation>Weight characteristic of the heaviest axle on the vehicle.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
        <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="heaviestAxleWeight" type="D2LogicalModel:Tonnes" minOccurs="1" maxOccurs="1">
            <xs:annotation>
                <xs:documentation>The weight of the heaviest axle on the vehicle.</xs:documentation>
            </xs:annotation>
        </xs:element>
        <xs:element name="heaviestAxleWeightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
</xs:complexType>
<xs:complexType name="HeightCharacteristic">
    <xs:annotation>
        <xs:documentation>Height characteristic of a vehicle.</xs:documentation>
    </xs:annotation>
    <xs:sequence>

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<xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleHeight" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in
metres.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="heightCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="InformationStatusEnum">
  <xs:annotation>
    <xs:documentation>Status of the related information (i.e. real, test or exercise).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="real">
      <xs:annotation>
        <xs:documentation>The information is real. It is not a test or exercise.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="securityExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which is for testing security.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="technicalExercise">
      <xs:annotation>
        <xs:documentation>The information is part of an exercise which includes tests of associated technical
subsystems.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="test">
      <xs:annotation>
        <xs:documentation>The information is part of a test for checking the exchange of this type of information.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Integer">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {-2147483648, -2147483647, -2147483646, ..., -2, -1, 0, 1, 2,
..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:integer" />
</xs:simpleType>
<xs:complexType name="InternationalIdentifier">
  <xs:annotation>
    <xs:documentation>An identifier/name whose range is specific to the particular country.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
      </xs:annotation>
    </xs:element>

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<xs:element name="nationalIdentifier" type="D2LogicalModel:String" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Identifier or name unique within the specified country.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="internationalIdentifierExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="Language">
  <xs:annotation>
    <xs:documentation>A language datatype, identifies a specified language by an ISO 639-1 2-alpha / ISO 639-2 3-alpha
code.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:language" />
</xs:simpleType>
<xs:complexType name="LengthCharacteristic">
  <xs:annotation>
    <xs:documentation>Length characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleLength" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The overall distance between the front and back of an individual vehicle, including the length of any trailers,
couplings, etc.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lengthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="LoadType2Enum">
  <xs:annotation>
    <xs:documentation>Loads that are currently not supported in loadType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="refrigeratedGoods">
      <xs:annotation>
        <xs:documentation>Refrigerated goods.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="LoadTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of load carried by a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="abnormalLoad">
      <xs:annotation>
        <xs:documentation>A load that exceeds normal vehicle dimensions in terms of height, length, width, gross vehicle weight or
axle weight or any combination of these. Generally termed an "abnormal load".</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="ammunition">
      <xs:annotation>

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```
<xs:documentation>Ammunition.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="chemicals">
  <xs:annotation>
    <xs:documentation>Chemicals of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="combustibleMaterials">
  <xs:annotation>
    <xs:documentation>Combustible materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="corrosiveMaterials">
  <xs:annotation>
    <xs:documentation>Corrosive materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="debris">
  <xs:annotation>
    <xs:documentation>Debris of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="empty">
  <xs:annotation>
    <xs:documentation>No load.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="explosiveMaterials">
  <xs:annotation>
    <xs:documentation>Explosive materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraHighLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional height.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraLongLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional length.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="extraWideLoad">
  <xs:annotation>
    <xs:documentation>A load of exceptional width.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fuel">
  <xs:annotation>
    <xs:documentation>Fuel of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="glass">
  <xs:annotation>
    <xs:documentation>Glass.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="goods">
```

```

<xs:annotation>
  <xs:documentation>Any goods of a commercial nature.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="hazardousMaterials">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a hazardous nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="liquid">
  <xs:annotation>
    <xs:documentation>Liquid of an unspecified nature.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="livestock">
  <xs:annotation>
    <xs:documentation>Livestock.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materials">
  <xs:annotation>
    <xs:documentation>General materials of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForPeople">
  <xs:annotation>
    <xs:documentation>Materials classed as being of a danger to people or animals.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForTheEnvironment">
  <xs:annotation>
    <xs:documentation>Materials classed as being potentially dangerous to the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="materialsDangerousForWater">
  <xs:annotation>
    <xs:documentation>Materials classed as being dangerous when exposed to water (e.g. materials which may react
exothermically with water).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="oil">
  <xs:annotation>
    <xs:documentation>Oil.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="ordinary">
  <xs:annotation>
    <xs:documentation>Materials that present limited environmental or health risk. Non-combustible, non-toxic, non-
corrosive.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="perishableProducts">
  <xs:annotation>
    <xs:documentation>Products or produce that will significantly degrade in quality or freshness over a short period of
time.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="petrol">
  <xs:annotation>

```

```
<xs:documentation>Petrol or petroleum.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="pharmaceuticalMaterials">
  <xs:annotation>
    <xs:documentation>Pharmaceutical materials.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="radioactiveMaterials">
  <xs:annotation>
    <xs:documentation>Materials that emit significant quantities of electro-magnetic radiation that may present a risk to people,
animals or the environment.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="refuse">
  <xs:annotation>
    <xs:documentation>Refuse.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="toxicMaterials">
  <xs:annotation>
    <xs:documentation>Materials of a toxic nature which may damage the environment or endanger public
health.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicles">
  <xs:annotation>
    <xs:documentation>Vehicles of any type which are being transported.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="MetresAsFloat">
  <xs:annotation>
    <xs:documentation>A measure of distance defined in metres in a floating point format.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="MonthOfYearEnum">
  <xs:annotation>
    <xs:documentation>A list of the months of the year.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="january">
      <xs:annotation>
        <xs:documentation>The month of January.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="february">
      <xs:annotation>
        <xs:documentation>The month of February.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="march">
```



```

<xs:annotation>
  <xs:documentation>The month of March.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="april">
  <xs:annotation>
    <xs:documentation>The month of April.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="may">
  <xs:annotation>
    <xs:documentation>The month of May.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="june">
  <xs:annotation>
    <xs:documentation>The month of June.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="july">
  <xs:annotation>
    <xs:documentation>The month of July.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="august">
  <xs:annotation>
    <xs:documentation>The month of August.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="september">
  <xs:annotation>
    <xs:documentation>The month of September.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="october">
  <xs:annotation>
    <xs:documentation>The month of October.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="november">
  <xs:annotation>
    <xs:documentation>The month of November.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="december">
  <xs:annotation>
    <xs:documentation>The month of December.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value" type="D2LogicalModel:MultilingualStringValue" maxOccurs="unbounded" />
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

    </xs:element>
  </xs:sequence>
</xs:complexType>
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValue" type="D2LogicalModel:MultilingualStringValue" />
    <xs:attribute name="lang" type="xs:language" />
  </xs:extension>
</xs:simpleContent>
</xs:complexType>
<xs:simpleType name="MultilingualStringValue" type="D2LogicalModel:MultilingualStringValue">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="NonNegativeInteger">
  <xs:annotation>
    <xs:documentation>An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646, 2147483647}.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:nonNegativeInteger" />
</xs:simpleType>
<xs:complexType name="NumberOfAxlesCharacteristic">
  <xs:annotation>
    <xs:documentation>Number of axles characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxles" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The total number of axles of an individual vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfAxlesCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="OccupancyChangeValue">
  <xs:annotation>
    <xs:documentation>A measured or calculated value of change of occupied parking spaces expressed as integer.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue" />
    <xs:sequence>
      <xs:element name="occupancyChange" type="D2LogicalModel:Integer" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>A measured or calculated absolut change of occupied parking spaces within a specified time expressed as integer.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="occupancyChangeValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
    </xs:sequence>
  </xs:extension>
</xs:complexContent>
</xs:complexType>

```

```

<xs:simpleType name="OpeningStatusEnum">
  <xs:annotation>
    <xs:documentation>The opening status of some entity (e.g. parking site, service facility, access,...)</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="open">
      <xs:annotation>
        <xs:documentation>Open resp. available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="closed">
      <xs:annotation>
        <xs:documentation>Closed, usually because of the regular opening times.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="closedAbnormal">
      <xs:annotation>
        <xs:documentation>Closed because of some scheduled or unscheduled event, like holiday, maintenance, construction works or
any kind of problems. It is possible that the closure will last for some time.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="openingTimesInForce">
      <xs:annotation>
        <xs:documentation>The normal opening times are in force, i.e. it is not explicit said if it's open right now.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="statusUnknown">
      <xs:annotation>
        <xs:documentation>The opening status is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="OperationStatusEnum">
  <xs:annotation>
    <xs:documentation>Specifies, whether some scenario or equipment is in operation or not.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="inOperation">
      <xs:annotation>
        <xs:documentation>The specified element is in operation right now.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="limitedOperation">
      <xs:annotation>
        <xs:documentation>The specified element is in operation on a limited basis.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notInOperation">
      <xs:annotation>
        <xs:documentation>The specified element is not operating right now.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="notInOperationAbnormal">

```

```

<xs:annotation>
  <xs:documentation>The specified element is not operating due to abnormal conditions (holidays, restoration-works, long-term
closure, ...).</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="technicalDefect">
  <xs:annotation>
    <xs:documentation>The specified element is not in operation due to a technical defect.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>There is no information about the operation status.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="OverallPeriod">
  <xs:annotation>
    <xs:documentation>A continuous or discontinuous period of validity defined by overall bounding start and end times and the
possible intersection of valid periods (potentially recurring) with the complement of exception periods (also potentially
recurring).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="overallStartTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overallEndTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>End of bounding period of validity defined by date and time.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is true.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="exceptionPeriod" type="D2LogicalModel:Period" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>A single time period, a recurring time period or a set of different recurring time periods during which validity
is false.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="overallPeriodExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingAccessStatus">
  <xs:annotation>
    <xs:documentation>The opening and fault status of one access.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="accessReference" type="D2LogicalModel:_ParkingAccessReference" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The reference to an access defined in the static part of the model.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

<xs:element name="accessOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The opening status of this access.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="accessFault" type="D2LogicalModel:ParkingFaultEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A fault indicator for this special access.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingAccessStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingConditionsEnum">
  <xs:annotation>
    <xs:documentation>Defines if normal parking conditions are suspended or special parking conditions are in
force.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="normalParkingConditionsSuspended">
      <xs:annotation>
        <xs:documentation>The parking conditions (possibly including tariffs) that normally apply are temporarily
suspended.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="specialParkingConditionsInForce">
      <xs:annotation>
        <xs:documentation>Parking conditions, other than those that normally apply, are currently in force for the parking
site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingEquipmentOrServiceFacilityStatus">
  <xs:annotation>
    <xs:documentation>The number of E&S can be overridden here (for example during restoration). Furthermore, the current
availability of E&S can be given (for example number of free electric charging stations). The E&S are identified from the
static model by an index.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="numberOfEquipmentOrServiceFacilityOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Overrides the static value 'numberOfEquipmentOrServiceFacility' (for example because of long- or midterm
closures, such as renovation).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfSubitemsOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Overrides the static value 'numberOfSubitems' (for example because of long- or midterm closures, such as
renovation).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vacantEquipmentOrServiceFacilitySubitems" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"

```

```

maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Sets the number of currently vacant elements of either equipment (e.g. free toilets) or service facility sub
items (e.g. free restaurant places).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="serviceFacilityOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies whether this service facility is open or not.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="equipmentOperationStatus" type="D2LogicalModel:OperationStatusEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies whether this equipment is available / is in operation or not.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingEquipmentOrServiceFacilityStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0"
/>
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingFaultEnum">
  <xs:annotation>
    <xs:documentation>Types of parking site or access faults.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="communicationsFailure">
      <xs:annotation>
        <xs:documentation>Communications failure affecting parking site.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="barrierMalfunction">
      <xs:annotation>
        <xs:documentation>The entrance or exit barrier(s) are malfunctioning causing access problems to
vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="entranceExitObstructed">
      <xs:annotation>
        <xs:documentation>One or more entrances or exits are obstructed to some degree causing access problems to
vehicles.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="erroneousOccupancyInformation">
      <xs:annotation>
        <xs:documentation>Occupancy information is subject to errors due to malfunctioning equipment.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="erroneousOccupancyDisplayed">
      <xs:annotation>
        <xs:documentation>Occupancy information displayed on signs associated with parking site (e.g. at entrance) are
erroneous.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="paymentMachinesInoperative">
      <xs:annotation>
        <xs:documentation>Payment machines are not functioning normally.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="reservationServiceOutOfOrder">

```

```

    <xs:annotation>
      <xs:documentation>Reservation service out of order.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="noParkingInformationAvailable">
    <xs:annotation>
      <xs:documentation>No parking information available.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unspecified">
    <xs:annotation>
      <xs:documentation>General fault of unspecified type.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown parking facility fault.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingOccupancy">
  <xs:annotation>
    <xs:documentation>Parking capacity information for the parking site as well as for AssignedParkingSpaces.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingNumberOfSpacesOverride" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Possibility to override the static value 'parkingNumberOfSpaces'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The total number of currently vacant parking spaces available in the specified parking site, group of parking
sites or group of parking spaces.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesLowerThan" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vacant parking spaces is lower than the given value (example: Less than 10 spaces are
free).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesHigherThan" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The number of vacant parking spaces is higher than the given value (example: More than 10 spaces are
free).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingNumberOfVacantSpacesGraded" type="D2LogicalModel:ParkingVacantSpacesEnum" minOccurs="0"

```

```

maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of vacant spaces by grading (enumeration).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingNumberOfOccupiedSpaces" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The number of currently occupied spaces in the specified parking site, group of parking sites or assigned
parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingNumberOfVehicles" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Number of vehicles (of specified type) on the parking site, the group of parking sites or the group of parking
spaces. Parking too narrow or too wide may effect differences to the 'occupiedSpaces' value. Should not include petrol station
traffic.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancy" type="D2LogicalModel:Percentage" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The percentage value of parking spaces occupied in the specified parking site, group of parking sites or
assigned parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancyGraded" type="D2LogicalModel:ParkingOccupancyEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Occupied parking spaces by a percentage-grading (enumeration).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingOccupancyTrend" type="D2LogicalModel:ParkingOccupancyTrendEnum" minOccurs="0"
maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The trend of the occupancy of the parking spaces in the specified parking site, group of parking sites or
assigned parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingNotAllowed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>In case of 'true', parking is not allowed (e.g. abnormal closure).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleCountAndRate" type="D2LogicalModel:VehicleCountAndRate" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingOccupancyExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingOccupancyEnum">
  <xs:annotation>
    <xs:documentation>Parking Occupancy enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="expectCarParkToBeFull">
      <xs:annotation>
        <xs:documentation>Expect car park to be full.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="percentage10">
      <xs:annotation>
    
```



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    <xs:documentation>10% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage20">
  <xs:annotation>
    <xs:documentation>20% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage30">
  <xs:annotation>
    <xs:documentation>30% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage40">
  <xs:annotation>
    <xs:documentation>40% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage50">
  <xs:annotation>
    <xs:documentation>50% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage60">
  <xs:annotation>
    <xs:documentation>60% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage70">
  <xs:annotation>
    <xs:documentation>70% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage80">
  <xs:annotation>
    <xs:documentation>80% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="percentage90">
  <xs:annotation>
    <xs:documentation>90% full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="full">
  <xs:annotation>
    <xs:documentation>Full.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="ParkingOccupancyTrendEnum">
  <xs:annotation>
    <xs:documentation>List of terms used to describe the trend in parking space occupancy.</xs:documentation>
  </xs:annotation>

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<xs:restriction base="xs:string">
  <xs:enumeration value="decreasing">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is decreasing.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="increasing">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is increasing.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="stable">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is stable.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="increasingQuickly">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is increasing quickly.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="increasingSlowly">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is increasing slowly.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="decreasingQuickly">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is decreasing quickly.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="decreasingSlowly">
    <xs:annotation>
      <xs:documentation>Parking space occupancy is decreasing slowly.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="unknown">
    <xs:annotation>
      <xs:documentation>Unknown.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingRecordStatus" abstract="true">
  <xs:annotation>
    <xs:documentation>Contains the current status of one parking record defined in the static model (i.e. parking site or group of parking sites) or historical or forecasted data for one parking. Only for the second case, 'parkingStatusTime' must be specified.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRecordReference" type="D2LogicalModel:_ParkingRecordVersionedReference" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a static parking record object, i.e. a parking site or a group of parking

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sites.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStatusOriginTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The time when the information in this message was generated. Unless 'ParkingStatusValidity' is used, this
is also the time the information in this message refers to.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStatusDescription" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Additional textual information about the parking status. Can also be used as an alternative in case the
enumeration values for 'parkingSiteStatus' or 'groupOfParkingSitesStatus' do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingQueueingTime" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The current queuing time (duration) for entering the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingConditions" type="D2LogicalModel:ParkingConditionsEnum" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Defines if normal parking conditions are suspended or special parking conditions are in
force.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="blurredAvailability" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>When true, all information about availability (free spaces etc.) is blurred (usually because of business
competition).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingFault" type="D2LogicalModel:ParkingFaultEnum" minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A fault indicator for the parking site.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="winterEquipmentManagementType" type="D2LogicalModel:WinterEquipmentManagementTypeEnum"
minOccurs="0" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Type of winter equipment management action instigated by operator.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingSpaceStatus" type="D2LogicalModel:_ParkingRecordStatusParkingSpaceIndexParkingSpaceStatus"
minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingOccupancy" type="D2LogicalModel:ParkingOccupancy" />
<xs:element name="groupOfParkingSpacesStatus"
type="D2LogicalModel:_ParkingRecordStatusGroupIndexGroupOfParkingSpacesStatus" minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingStatusValidity" type="D2LogicalModel:ParkingStatusValidity" minOccurs="0" />
<xs:element name="overrideParkingThresholds" type="D2LogicalModel:ParkingThresholds" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Possibility to override the thresholds for the parking, which are in principle defined in the static part of the
model (ParkingStatusPublication).</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingEquipmentOrServiceFacilityStatus"
type="D2LogicalModel:_ParkingRecordStatusEquipmentOrServiceFacilityIndexParkingEquipmentOrServiceFacilityStatus"
minOccurs="0" maxOccurs="unbounded" />
<xs:element name="parkingUsageScenarioStatus"

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type="D2LogicalModel:_ParkingRecordStatusScenarioIndexParkingUsageScenarioStatus" minOccurs="0" maxOccurs="unbounded"
/>
  <xs:element name="parkingAccessStatus" type="D2LogicalModel:ParkingAccessStatus" minOccurs="0" maxOccurs="unbounded"
/>
  <xs:element name="parkingRouteStatus" type="D2LogicalModel:ParkingRouteStatus" minOccurs="0" maxOccurs="unbounded" />
  <xs:element name="parkingRecordStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingRouteStatus">
  <xs:annotation>
    <xs:documentation>The status of a parking route (active/inactive) defined in the static part of the model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingRouteReference" type="D2LogicalModel:_ParkingRouteDetailsVersionedReference" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a parking route.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingRouteActive" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Defines if this parking route is currently active or not.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingRouteStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingSiteOvercrowdingStatusEnum">
  <xs:annotation>
    <xs:documentation>The overcrowding status of the parking site. Choose between two levels or simply (no)
overcrowding.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="overcrowding">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="noOvercrowding">
      <xs:annotation>
        <xs:documentation>The parking site is not overcrowded.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overcrowdingLevel1">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded at level 1 (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="overcrowdingLevel2">
      <xs:annotation>
        <xs:documentation>The parking site is overcrowded at level 2 (as specified in ParkingThresholds).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="unknown">
      <xs:annotation>
        <xs:documentation>The overcrowding level is unknown.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">

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    <xs:annotation>
      <xs:documentation>Other.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSiteStatus">
  <xs:annotation>
    <xs:documentation>Dynamic status information for the static object 'ParkingSite'.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:ParkingRecordStatus">
      <xs:sequence>
        <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteOpeningStatus" type="D2LogicalModel:OpeningStatusEnum" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The opening status of the parking site (open or not).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteOvercrowdingStatus" type="D2LogicalModel:ParkingSiteOvercrowdingStatusEnum"
minOccurs="0" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>The overcrowding status of the parking site. Choose between using a two-stage approach or the more
general statement '(not) overcrowding'. You can sharpen this information by using the 'Thresholds' component. </xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteFullAtFloor" type="D2LogicalModel:Integer" minOccurs="0" maxOccurs="unbounded">
          <xs:annotation>
            <xs:documentation>The parking site is full at the specified floor(s).</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="parkingSiteStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:simpleType name="ParkingSiteStatusEnum">
  <xs:annotation>
    <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="spacesAvailable">
      <xs:annotation>
        <xs:documentation>Parking spaces are currently available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="almostFull">
      <xs:annotation>
        <xs:documentation>The parking site is almost full (as defined by its configuration parameters).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fullAtEntrance">
      <xs:annotation>
        <xs:documentation>The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing
VMS).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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</xs:annotation>
</xs:enumeration>
<xs:enumeration value="full">
  <xs:annotation>
    <xs:documentation>The parking site is full (as defined by its configuration parameters).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>The status of the parking site is unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="ParkingSpaceStatus">
  <xs:annotation>
    <xs:documentation>Status (occupied or closed) for a single parking space which was defined in the static part of the
model.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSpaceOccupied" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>True: Parking space is occupied; False: Parking space is free.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSpaceClosed" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>True: The parking space is closed / not accessible. False or omitted: The parking space is accessible. This
is no statement about its occupation.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSpaceDeclarationValidNow" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Override validity of 'ParkingSpace': True = Parking space declaration is valid now; False = Parking space
declaration is invalid now; Omitted = Static validity information is significant (if static validity is omitted too, declaration is
valid).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
future time at which a data value is predicted.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lastCalibration" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date of last calibration of the detection system in question.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingSpaceStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusColourMapping">
  <xs:annotation>

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    <xs:documentation>Defines a pair of 'parkingSiteStatus' and a corresponding colour.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingSiteStatus" type="D2LogicalModel:ParkingSiteStatusEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The status of the parking site (spaces available or not).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbColour" type="D2LogicalModel:RGBColour" />
    <xs:element name="parkingStatusColourMappingExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusPublication">
  <xs:annotation>
    <xs:documentation>A publication containing the current status of one or more parking sites and/or group of parking sites.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingTableReference" type="D2LogicalModel:_ParkingTableVersionedReference" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables here.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="headerInformation" type="D2LogicalModel:HeaderInformation" minOccurs="0" />
    <xs:element name="parkingRecordStatus" type="D2LogicalModel:ParkingRecordStatus" maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingStatusValidity">
  <xs:annotation>
    <xs:documentation>To be used only for historical or forecasted data. Choose between an explicit point of time, an offset or all points of time within a specified period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="parkingStatusTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only use for forecasts or historical data to express the point of time for which the information of this parking is either reported or forecasted. Alternately you can define this point of time as an offset with 'parkingStatusTimeOffsetToOrigin'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusTimeOffsetToOrigin" type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Only use for forecasts or historical data to express the point of time for which the information of this parking is either reported or forecasted (in form of an offset in seconds to 'parkingStatusOriginTime'; use negative values for historical data).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="validityTimeSpecification" type="D2LogicalModel:OverallPeriod" minOccurs="0">
      <xs:annotation>
        <xs:documentation>A specification of periods of validity defined by overall bounding start and end times and the possible intersection of valid periods with exception periods (exception periods overriding valid periods).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingStatusValidityExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingThresholds">

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<xs:annotation>
  <xs:documentation>Configuration parameters of the parking site, used among others for the dynamic attribute 'parkingStatus'.
  This component or all elements of it can be overridden in the dynamic model.</xs:documentation>
</xs:annotation>
<xs:sequence>
  <xs:element name="almostFullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from
      'almost full' to 'spaces available' as the parking site's occupancy decreases. Must be greater than 'almostFullIncreasing'
      value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="almostFullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces below which the state of the site is considered to change from 'spaces
      available' to 'almost full' as the site's occupancy increases. Must be lower or equal to 'almostFullDecreasing' and greater
      'fullDecreasing'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="entranceFull" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces below which the parking site is considered to be 'full' at its entrance (e.g.
      full sign is displayed at entrance or on managing VMS).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="fullDecreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces above which the state of the parking site is considered to change from 'full'
      to 'almost full' as the site's occupancy decreases. Must be greater or equal to 'fullIncreasing' value and lower than
      'almostFullIncreasing'.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="fullIncreasing" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of available spaces below which the state of the parking site is considered to change from
      'almost full' to 'full' as the site's occupancy increases. Must be lower than or equal to 'fullDecreasing' value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowding" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking above which the overcrowding state of the parking site is considered
      to change to 'overcrowding'. Can be used as an alternative to the overcrowding level attributes.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowdingLevel1" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
      considered to change from 'noOvercrowding' to 'overcrowdingLevel1'. Must be lower than the 'overcrowdingLevel2'
      value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="overcrowdingLevel2" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>The number of vehicles on the parking site above which the overcrowding state of the parking site is
      considered to change from 'overcrowdingLevel1' to 'overcrowdingLevel2'. Must be greater than the 'overcrowdingLevel1'
      value.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="parkingLastMaximumOccupancy" type="D2LogicalModel:NonNegativeInteger" minOccurs="0"

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maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The last known occupancy (number of parking vehicles on the site) under safe
conditions.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="parkingStatusColourMapping" type="D2LogicalModel:ParkingStatusColourMapping" minOccurs="0"
maxOccurs="unbounded" />
  <xs:element name="parkingThresholdsExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="ParkingUsageScenarioStatus">
  <xs:annotation>
    <xs:documentation>The current status for this parking usage scenario.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="usageScenarioOperationStatus" type="D2LogicalModel:OperationStatusEnum" minOccurs="1"
maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The current status for this parking usage scenario.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="parkingUsageScenarioStatusExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="ParkingVacantSpacesEnum">
  <xs:annotation>
    <xs:documentation>Parking vacant spaces enum.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="noParkingSpacesAvailable">
      <xs:annotation>
        <xs:documentation>No parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="expectNoSpacesAvailable">
      <xs:annotation>
        <xs:documentation>Expect no parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="onlyAFewSpacesAvailable">
      <xs:annotation>
        <xs:documentation>Only a few parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan10SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 10 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan20SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 20 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lessThan30SpacesAvailable">
      <xs:annotation>
        <xs:documentation>Less than 30 parking spaces available.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:enumeration>
<xs:enumeration value="lessThan40SpacesAvailable">
  <xs:annotation>
    <xs:documentation>Less than 40 parking spaces available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lessThan50SpacesAvailable">
  <xs:annotation>
    <xs:documentation>Less than 50 parking spaces available.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:annotation>
    <xs:documentation>A payload publication of traffic related information or associated management information created at a specific
point in time that can be exchanged via a DATEX II interface.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="publicationTime" type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date/time at which the payload publication was created.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicationCreator" type="D2LogicalModel:InternationalIdentifier" />
    <xs:element name="payloadPublicationExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language" use="required">
    <xs:annotation>
      <xs:documentation>The default language used throughout the payload publication.</xs:documentation>
    </xs:annotation>
  </xs:attribute>
</xs:complexType>
<xs:simpleType name="Percentage">
  <xs:annotation>
    <xs:documentation>A measure of percentage.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="Period">
  <xs:annotation>
    <xs:documentation>A continuous time period or a set of discontinuous time periods defined by the intersection of a set of criteria
all within an overall delimiting interval.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="startOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Start of period.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>

```

```

</xs:element>
<xs:element name="endOfPeriod" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>End of a period.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="periodName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The name of the period.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="recurringTimePeriodOfDay" type="D2LogicalModel:TimePeriodOfDay" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A recurring period of a day.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="recurringDayWeekMonthPeriod" type="D2LogicalModel:DayWeekMonth" minOccurs="0"
maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>A recurring period defined in terms of days of the week, weeks of the month and months of the year.
</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="periodExtension" type="D2LogicalModel:_PeriodExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:complexType name="PeriodExtended">
  <xs:annotation>
    <xs:documentation>An extension point for Period offering the possibility to describe special days and public
holidays.</xs:documentation>
  </xs:annotation>
<xs:sequence>
  <xs:element name="recurringSpecialDay" type="D2LogicalModel:SpecialDay" minOccurs="0" maxOccurs="unbounded">
    <xs:annotation>
      <xs:documentation>A recurring period in terms of special days.</xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="PublicHoliday">
  <xs:annotation>
    <xs:documentation>Specification of the public holiday type in a specific country or region. Use this component only when
specialDayType is set to 'publicHoliday' or 'holidays'.</xs:documentation>
  </xs:annotation>
<xs:sequence>
  <xs:element name="country" type="D2LogicalModel:CountryEnum" minOccurs="1" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>ISO 3166-1 two character country code.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="countrySubdivision" type="D2LogicalModel:String" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>ISO 3166-2 country sub-division code (up to 3 characters).</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="region" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>Region of country (e.g. "Scotland", "Wales" etc. if country = GB) </xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:sequence>

```

```

</xs:annotation>
</xs:element>
<xs:element name="publicHolidayType" type="D2LogicalModel:PublicHolidayTypeEnum" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specifies the public holiday type for the country or region.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Specification of public holiday, if the enumeration values do not fit.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="publicHolidayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="PublicHolidayTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of public holiday.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="betweenChristmasAndNewYear">
      <xs:annotation>
        <xs:documentation>The days between the Christmas and New Year public holidays which are not official public
        holidays.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="boxingDay">
      <xs:annotation>
        <xs:documentation>The day following Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bridgeHoliday">
      <xs:annotation>
        <xs:documentation>A day between a public holiday and the weekend.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasEve">
      <xs:annotation>
        <xs:documentation>The day before Christmas day.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasDayAndBoxingDay">
      <xs:annotation>
        <xs:documentation>Christmas day and Boxing day (day following Christmas day).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="christmasHolidayPeriod">
      <xs:annotation>
        <xs:documentation>The period between the Christmas and New Year public holidays (inclusive).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="dayFollowingPublicHoliday">
      <xs:annotation>
        <xs:documentation>A day following a public holiday.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="easterFridayHoliday">
      <xs:annotation>
        <xs:documentation>Good Friday (the Friday prior to the Easter weekend).</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterHolidayPeriod">
  <xs:annotation>
    <xs:documentation>The period between Easter Friday and Easter Monday (inclusive).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterMondayHoliday">
  <xs:annotation>
    <xs:documentation>The Monday following the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSaturday">
  <xs:annotation>
    <xs:documentation>The Saturday of the Easter weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="easterSunday">
  <xs:annotation>
    <xs:documentation>Easter Sunday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="eveOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>The day preceding a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidayPeriod">
  <xs:annotation>
    <xs:documentation>A holiday period.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="inLieuOfPublicHoliday">
  <xs:annotation>
    <xs:documentation>A holiday in lieu of a public holiday that falls on a weekend.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="january2ndHoliday">
  <xs:annotation>
    <xs:documentation>The 2nd of January holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsDay">
  <xs:annotation>
    <xs:documentation>New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="newYearsEve">
  <xs:annotation>
    <xs:documentation>The day before New Year's day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notPublicHoliday">
  <xs:annotation>
    <xs:documentation>A day that is not a public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>

```

```

    <xs:documentation>A public holiday in the respective country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>None of the elements in the list. Public holiday is specified by 'publicHolidayName'
instead.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="Reference">
  <xs:attribute name="id" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="ResponseEnum">
  <xs:annotation>
    <xs:documentation>Types of response that a supplier can return to a requesting client.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="acknowledge">
      <xs:annotation>
        <xs:documentation>An acknowledgement that the supplier has received and complied with the client's
request.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="requestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a data.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="subscriptionRequestDenied">
      <xs:annotation>
        <xs:documentation>A notification that the supplier has denied the client's request for a subscription.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
<xs:complexType name="RGBColour">
  <xs:annotation>
    <xs:documentation>An RGB colour described by values for red, green and blue (0..255) as well as an optional
name.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="rgbRedValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The red value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbGreenValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The green value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="rgbBlueValue" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The blue value of the RGB colour (0..255).</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="colourName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">

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    <xs:annotation>
      <xs:documentation>The name of the colour.</xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:sequence>
</xs:complexType>
<xs:simpleType name="Seconds">
  <xs:annotation>
    <xs:documentation>Seconds.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:complexType name="SpecialDay">
  <xs:annotation>
    <xs:documentation>Specification of a special day, for example schoolDay, electionDay, ... Gives also the possibility to define a
    public holiday (country specific).</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="intersectWithApplicableDays" type="D2LogicalModel:Boolean" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>When true, the period is the intersection of applicable days and this special day. When false, the period is
        the union of applicable days and this special day.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specialDayType" type="D2LogicalModel:SpecialDayTypeEnum" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of a special day, for example schoolDay, electionDay, .. .</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="specialDayName" type="D2LogicalModel:MultilingualString" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specification of a special day, if the enumeration values do not fit.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="publicHoliday" type="D2LogicalModel:PublicHoliday" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="specialDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:annotation>
    <xs:documentation>Collection of general types of days.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="bicycleRaceDay">
      <xs:annotation>
        <xs:documentation>Day of local bicycle race.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bullFightDay">
      <xs:annotation>
        <xs:documentation>Day of local bullfight.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="carnivalDay">
      <xs:annotation>
        <xs:documentation>Day of a local carnival involving a procession along roads.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

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```
<xs:enumeration value="exhibitionDay">
  <xs:annotation>
    <xs:documentation>Day of a local exhibition.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="festivalDay">
  <xs:annotation>
    <xs:documentation>Day of a local festival.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="gamesDay">
  <xs:annotation>
    <xs:documentation>Day of local games (e.g. highland games in Scotland).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="horseRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local horse race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="huntMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local hunt meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marathonRaceDay">
  <xs:annotation>
    <xs:documentation>Day of local marathon race.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="marketDay">
  <xs:annotation>
    <xs:documentation>Day of a local market.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorSportRaceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local motor sport race meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="nonWorkingDay">
  <xs:annotation>
    <xs:documentation>A non-working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="raceMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local race meeting (other than horse or motor sport).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="regattaDay">
  <xs:annotation>
    <xs:documentation>Day of a local regatta.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="showDay">
  <xs:annotation>
    <xs:documentation>Day of a local show.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
```



```

</xs:enumeration>
<xs:enumeration value="sportsMeetingDay">
  <xs:annotation>
    <xs:documentation>Day of a local sports meeting.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="workingDay">
  <xs:annotation>
    <xs:documentation>A working day in the specific country/region.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="schoolDay">
  <xs:annotation>
    <xs:documentation>School day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="electionDay">
  <xs:annotation>
    <xs:documentation>Election day.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="publicHoliday">
  <xs:annotation>
    <xs:documentation>Public holiday.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="holidays">
  <xs:annotation>
    <xs:documentation>A day within the school holidays. You can use the PublicHoliday class to specify more
details.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="undefinedDayType">
  <xs:annotation>
    <xs:documentation>UndefinedDayType</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="other">
  <xs:annotation>
    <xs:documentation>Other.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="String">
  <xs:annotation>
    <xs:documentation>A character string whose value space is the set of finite-length sequences of characters. Every character has
a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024" />
  </xs:restriction>
</xs:simpleType>
<xs:simpleType name="Time">

```

```

<xs:annotation>
  <xs:documentation>An instant of time that recurs every day. The value space of time is the space of time of day values as defined
in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.</xs:documentation>
</xs:annotation>
<xs:restriction base="xs:time" />
</xs:simpleType>
<xs:complexType name="TimePeriodByHour">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period within a 24 hour period by times.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TimePeriodOfDay">
      <xs:sequence>
        <xs:element name="startTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>Start of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="endTimeOfPeriod" type="D2LogicalModel:Time" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>End of time period.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="timePeriodByHourExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="TimePeriodOfDay" abstract="true">
  <xs:annotation>
    <xs:documentation>Specification of a continuous period of time within a 24 hour period.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="timePeriodOfDayExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="Tonnes">
  <xs:annotation>
    <xs:documentation>A measure of weight defined in metric tonnes.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:Float" />
</xs:simpleType>
<xs:simpleType name="UrgencyEnum">
  <xs:annotation>
    <xs:documentation>Degrees of urgency that a receiving client should associate with the disseminate of the information contained
in the publication.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="extremelyUrgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is extremely urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="urgent">
      <xs:annotation>
        <xs:documentation>Dissemination of the information is urgent.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="normalUrgency">

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```

    <xs:annotation>
      <xs:documentation>Dissemination of the information is of normal urgency.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleCharacteristics">
  <xs:annotation>
    <xs:documentation>The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="fuelType" type="D2LogicalModel:FuelTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of fuel used by the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="loadType" type="D2LogicalModel:LoadTypeEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of load carried by the vehicle, especially in respect of hazardous loads.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleEquipment" type="D2LogicalModel:VehicleEquipmentEnum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The type of equipment in use or on board the vehicle.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType" type="D2LogicalModel:VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded">
      <xs:annotation>
        <xs:documentation>Vehicle type.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="grossWeightCharacteristic" type="D2LogicalModel:GrossWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="heightCharacteristic" type="D2LogicalModel:HeightCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="lengthCharacteristic" type="D2LogicalModel:LengthCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="widthCharacteristic" type="D2LogicalModel:WidthCharacteristic" minOccurs="0" maxOccurs="2" />
    <xs:element name="heaviestAxleWeightCharacteristic" type="D2LogicalModel:HeaviestAxleWeightCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="numberOfAxlesCharacteristic" type="D2LogicalModel:NumberOfAxlesCharacteristic" minOccurs="0"
maxOccurs="2" />
    <xs:element name="vehicleCharacteristicsExtension" type="D2LogicalModel:_VehicleCharacteristicsExtensionType"
minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCharacteristicsExtended">
  <xs:annotation>
    <xs:documentation>Extension point for 'VehicleCharacteristics' to support additional attributes and literals like additional fuel
types, load types etc.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="loadType2" type="D2LogicalModel:LoadType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Loads currently not supported in 'LoadTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleType2" type="D2LogicalModel:VehicleType2Enum" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Vehicle types currently not supported in 'VehicleTypeEnum'.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
</xs:complexType>

```

```

</xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCountAndRate">
  <xs:annotation>
    <xs:documentation>Vehicle rates can be assigned to a parking site or to assigned parking spaces. Furthermore, they can
reference to a measurement site or to an entrance/exit.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="measurementSiteReference" type="D2LogicalModel:_MeasurementSiteRecordVersionedReference"
minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>A reference to a versioned measurement site record defined in a Measurement Site
table.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measuredValueIndex" type="D2LogicalModel:NonNegativeInteger" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>If a measurement site is specified, the index of the measured value can be specified
here.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="dedicatedAccess" type="D2LogicalModel:_ParkingAccessReference" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Specifies a reference to an access, object (i.e. an entrance, an exit or both). A Point location and further
characteristics can be specified for those objects.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measurementTimeDefault" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>The time associated with the set of measurements. It may be the time of the beginning, the end or the
middle of the measurement period.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="lastCalibration" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Date of last calibration of the detection system in question.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="coveringPetrolStationArea" type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Indication, if this detector also covers the area of a petrol station.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="vehicleCountWithinInterval" type="D2LogicalModel:VehicleCountWithinInterval" minOccurs="0"
maxOccurs="unbounded" />
    <xs:element name="vehicleRate" type="D2LogicalModel:VehicleRate" minOccurs="0" maxOccurs="unbounded" />
    <xs:element name="vehicleCountAndRateExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:complexType name="VehicleCountValue">
  <xs:annotation>
    <xs:documentation>A measured or calculated value of absolute count of vehicles within a specified period of time expressed as
non negative integer.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="vehicleCount" type="D2LogicalModel:NonNegativeInteger" minOccurs="1" maxOccurs="1">

```

```

    <xs:annotation>
      <xs:documentation>A measured or calculated absolute count of vehicles within a specified period of time expressed as non
negative integer.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="vehicleCountValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
<xs:complexType name="VehicleCountWithinInterval">
  <xs:annotation>
    <xs:documentation>Gives incoming and/or outgoing vehicles and/or change of occupied spaces within a given interval. The
interval is given in positive or negative seconds related to 'measurementOrCalculationTime' or
'measurementDefaultTime'.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
future time at which a data value is predicted.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="measurementInterval" type="D2LogicalModel:Seconds" minOccurs="1" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Interval for which the data applies. Usually, this value should be negative. Example: - 300 = last 5 minutes
up to 'measurementOrCalculationTime' or 'measurementTimeDefault'. Use a positive value only for predictions. Example: 600 = next
ten minutes.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfIncomingVehicles" type="D2LogicalModel:VehicleCountValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Number of vehicles of specified type that entered the specified parking within the given
interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="numberOfOutgoingVehicles" type="D2LogicalModel:VehicleCountValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>Number of vehicles of specified type that left the specified parking within the given
interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="changeOfOccupiedSpaces" type="D2LogicalModel:OccupancyChangeValue" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The change in the number of occupied spaces for specified vehicles within the given interval. Negative
values mean less occupied spaces than at the beginning of the interval.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="countedVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0" />
    <xs:element name="vehicleCountWithinIntervalExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
<xs:simpleType name="VehicleEquipmentEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle equipment in use or on board.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="notUsingSnowChains">
      <xs:annotation>

```

```

    <xs:documentation>Vehicle not using snow chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="notUsingSnowChainsOrTyres">
  <xs:annotation>
    <xs:documentation>Vehicle not using either snow tyres or snow chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="snowChainsInUse">
  <xs:annotation>
    <xs:documentation>Vehicle using snow chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="snowTyresInUse">
  <xs:annotation>
    <xs:documentation>Vehicle using snow tyres.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="snowChainsOrTyresInUse">
  <xs:annotation>
    <xs:documentation>Vehicle using snow tyres or snow chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withoutSnowTyresOrChainsOnBoard">
  <xs:annotation>
    <xs:documentation>Vehicle which is not carrying on board snow tyres or chains.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VehicleFlowValue">
  <xs:annotation>
    <xs:documentation>A measured or calculated value of the flow rate of vehicles.</xs:documentation>
  </xs:annotation>
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="vehicleFlowRate" type="D2LogicalModel:VehiclesPerHour" minOccurs="1" maxOccurs="1">
          <xs:annotation>
            <xs:documentation>A value of vehicle flow rate expressed in vehicles per hour.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="vehicleFlowValueExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
<xs:complexType name="VehicleRate">
  <xs:annotation>
    <xs:documentation>Gives information about fill and exit rates OR vehicle flow rate (without direction). If the time stamp is omitted,
    'measurementTimeDefault' is used.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="measurementOrCalculationTime" type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1">
      <xs:annotation>
        <xs:documentation>Point in time at which this specific value or set of values has been measured or calculated. It may also be a
        future time at which a data value is predicted.</xs:documentation>
      </xs:annotation>
    </xs:element>

```

```

<xs:element name="fillRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
  <xs:annotation>
    <xs:documentation>The rate at which vehicles are entering the parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="exitRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
  <xs:annotation>
    <xs:documentation>The rate at which vehicles are exiting the parking.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="vehicleFlowRate" type="D2LogicalModel:VehicleFlowValue" minOccurs="0">
  <xs:annotation>
    <xs:documentation>A value of vehicle flow rate expressed in vehicles per hour.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="measuredVehicles" type="D2LogicalModel:VehicleCharacteristics" minOccurs="0" />
<xs:element name="vehicleRateExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="VehiclesPerHour">
  <xs:annotation>
    <xs:documentation>Vehicles per hour.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="D2LogicalModel:NonNegativeInteger" />
</xs:simpleType>
<xs:simpleType name="VehicleType2Enum">
  <xs:annotation>
    <xs:documentation>Vehicle types which are currently not supported in vehicleType.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="motorhome">
      <xs:annotation>
        <xs:documentation>Motorhome</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="lightGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Light goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="heavyGoodsVehicle">
      <xs:annotation>
        <xs:documentation>Heavy goods vehicle</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="minibus">
      <xs:annotation>
        <xs:documentation>Minibus</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="smallCar">
      <xs:annotation>
        <xs:documentation>Small car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="largeCar">
      <xs:annotation>
        <xs:documentation>Large car</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>

```

```
</xs:enumeration>
<xs:enumeration value="lightGoodsVehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Light goods vehicle with trailer</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyGoodsVehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Heavy goods vehicle with trailer</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="heavyHaulageVehicle">
  <xs:annotation>
    <xs:documentation>Heavy-haulage vehicle</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="passengerCar">
  <xs:annotation>
    <xs:documentation>Passenger car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="unknown">
  <xs:annotation>
    <xs:documentation>Unknown.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:simpleType name="VehicleTypeEnum">
  <xs:annotation>
    <xs:documentation>Types of vehicle.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="anyVehicle">
      <xs:annotation>
        <xs:documentation>Vehicle of any type.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="articulatedVehicle">
      <xs:annotation>
        <xs:documentation>Articulated vehicle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bicycle">
      <xs:annotation>
        <xs:documentation>Bicycle.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="bus">
      <xs:annotation>
        <xs:documentation>Bus.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="car">
```



```

<xs:annotation>
  <xs:documentation>Car.</xs:documentation>
</xs:annotation>
</xs:enumeration>
<xs:enumeration value="caravan">
  <xs:annotation>
    <xs:documentation>Caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carOrLightVehicle">
  <xs:annotation>
    <xs:documentation>Car or light vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithCaravan">
  <xs:annotation>
    <xs:documentation>Car towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="carWithTrailer">
  <xs:annotation>
    <xs:documentation>Car towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="constructionOrMaintenanceVehicle">
  <xs:annotation>
    <xs:documentation>Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry
mounted crane etc.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="fourWheelDrive">
  <xs:annotation>
    <xs:documentation>Four wheel drive vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="highSidedVehicle">
  <xs:annotation>
    <xs:documentation>High sided vehicle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="lorry">
  <xs:annotation>
    <xs:documentation>Lorry of any type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="moped">
  <xs:annotation>
    <xs:documentation>Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by
normally having pedals).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycle">
  <xs:annotation>
    <xs:documentation>Motorcycle.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorcycleWithSideCar">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle comprising a motorcycle with an attached side car.</xs:documentation>
  </xs:annotation>
</xs:enumeration>

```

```

</xs:annotation>
</xs:enumeration>
<xs:enumeration value="motorscooter">
  <xs:annotation>
    <xs:documentation>Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter
wheels).</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tanker">
  <xs:annotation>
    <xs:documentation>Vehicle with large tank for carrying bulk liquids.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="threeWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Three wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="trailer">
  <xs:annotation>
    <xs:documentation>Trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="tram">
  <xs:annotation>
    <xs:documentation>Tram.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="twoWheeledVehicle">
  <xs:annotation>
    <xs:documentation>Two wheeled vehicle of unspecified type.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="van">
  <xs:annotation>
    <xs:documentation>Van.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle with catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithoutCatalyticConverter">
  <xs:annotation>
    <xs:documentation>Vehicle without catalytic converter.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithCaravan">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a caravan.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="vehicleWithTrailer">
  <xs:annotation>
    <xs:documentation>Vehicle (of unspecified type) towing a trailer.</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="withEvenNumberedRegistrationPlates">

```

```

    <xs:annotation>
      <xs:documentation>Vehicle with even numbered registration plate.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="withOddNumberedRegistrationPlates">
    <xs:annotation>
      <xs:documentation>Vehicle with odd numbered registration plate.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="other">
    <xs:annotation>
      <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="VersionedReference">
  <xs:attribute name="id" type="xs:string" use="required" />
  <xs:attribute name="version" type="xs:string" use="required" />
</xs:complexType>
<xs:simpleType name="WeekOfMonthEnum">
  <xs:annotation>
    <xs:documentation>Weeks of the month.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeekOfMonth">
      <xs:annotation>
        <xs:documentation>First week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="secondWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Second week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="thirdWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Third week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fourthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fourth week of the month.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="fifthWeekOfMonth">
      <xs:annotation>
        <xs:documentation>Fifth week of the month (at most only 3 days and non in February when not a leap year).
      </xs:documentation>
    </xs:annotation>
  </xs:enumeration>
</xs:restriction>
</xs:simpleType>
<xs:complexType name="WidthCharacteristic">
  <xs:annotation>
    <xs:documentation>Width characteristic of a vehicle.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="comparisonOperator" type="D2LogicalModel:ComparisonOperatorEnum" minOccurs="1" maxOccurs="1">

```

```
<xs:annotation>
  <xs:documentation>The operator to be used in the vehicle characteristic comparison operation.</xs:documentation>
</xs:annotation>
</xs:element>
<xs:element name="vehicleWidth" type="D2LogicalModel:MetresAsFloat" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The maximum width of an individual vehicle, in metres.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:sequence>
  <xs:element name="widthCharacteristicExtension" type="D2LogicalModel:_ExtensionType" minOccurs="0" />
</xs:sequence>
</xs:complexType>
<xs:simpleType name="WinterEquipmentManagementTypeEnum">
  <xs:annotation>
    <xs:documentation>Instructions relating to the use of winter equipment.</xs:documentation>
  </xs:annotation>
  <xs:restriction base="xs:string">
    <xs:enumeration value="doNoUseStudTyres">
      <xs:annotation>
        <xs:documentation>Do not use stud tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowChains">
      <xs:annotation>
        <xs:documentation>Use snow chains.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowChainsOrTyres">
      <xs:annotation>
        <xs:documentation>Use snow chains or snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="useSnowTyres">
      <xs:annotation>
        <xs:documentation>Use snow tyres.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="winterEquipmentOnBoardRequired">
      <xs:annotation>
        <xs:documentation>The carrying of winter equipment (snow chains and/or snow tyres) is required.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="other">
      <xs:annotation>
        <xs:documentation>Other than as defined in this enumeration.</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
  </xs:restriction>
</xs:simpleType>
</xs:schema>
```

## Annex J (informative)

### XML encoding examples

#### J.1 ParkingTablePublication for Truck Parking

##### J.1.1 Overview

The following XML code validates against the DATEX II Truck Parking profile specified in normative Annex A and represents the following:

- One table with one Truck Parking site (with names, time stamps etc.).
- Detection type: balancing.
- Telephone number of a security service.
- Operator with address details, 24 hours available, agreement to publish its data.
- Reference to a VMS, VMS operator with note "same as operator".
- Parking location in coordinates, in addition as a junction on a specified motorway, 50 metres distance (from junction to motorway).
- Between 8 PM and 7 AM only lorries are allowed.
- A specific chemical element is not allowed on the parking.
- There is a parking charge of 10 Euros per day (86400 seconds) for vehicles greater 7.5 tonnes from the 1st of April 2014 on. There is no reservation fee. Charge has to be paid by a prepaid token with Mastercard or VISA-card.
- There are 2 toilets for handicapped people (also handicapped accessible) open 24 hours all year and free of charge.
- The parking is associated with a rest area.
- There is one petrol station (incl. it's brand name, a photo url) with 8 fuel dispensers.
- There are 120 spaces for lorries (but not exclusive for lorries).
- There are 3 spaces for heavy haulage vehicles, each at least with size 40m x 5m.
- One of these 3 spaces is specified further: barrierFreeAccessible, drive through (i.e. same direction in and out), open air, parallel parking, no reservation possible, 500m to the primaray road, no dynamic parking management, single space detection, with cctv, with 1 electric charging station for electric supply of lorries open 24 hours all year, point location in coordinates (for map display), with size 40m x 5m.
- There are no spaces for refrigerated good vehicles.
- With more than 130 vehicles, this parking should be marked as being overcrowded.

- Open fire is prohibited.
- The parking site is 500m x 500m in size and has a usable parking area of 200.000m<sup>2</sup>.
- Address information of the parking site.
- There is a vehicle entrance specified with point coordinates and the next primary road (with identifier and direction).
- The parking site is under social control (i.e. there are some neighbours), has got cctv, dogs and a national security classification of 5.
- It's a motorway Truck Parking site with no dynamic parking management.

### J.1.2 XML representation

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel xmlns="http://datex2.eu/schema/2/2_0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://datex2.eu/schema/2/2_0 TruckParkingTablePublication.xsd" modelBaseVersion="2">
  <exchange>
    <supplierIdentification>
      <country>de</country>
      <nationalIdentifier>xxxxxxxxxxx</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="GenericPublication" lang="de">
    <publicationTime>2014-01-01T09:00:00.0</publicationTime>
    <publicationCreator>
      <country>de</country>
      <nationalIdentifier>xxxxxxxxxxxx</nationalIdentifier>
    </publicationCreator>
    <genericPublicationName>ParkingTablePublication</genericPublicationName>
    <genericPublicationExtension>
      <parkingTablePublication>
        <parkingTable id="8E580AC1-4B1B-4205-81A2-E321F207F648B" version="3">
          <parkingTableName>
            <values>
              <value lang="de">LKW-Parkplätze Region Süd</value>
            </values>
          </parkingTableName>
          <parkingTableVersionTime>2014-01-04T18:13:51.0</parkingTableVersionTime>
          <!-- Group of 1200 spaces along motorway A345 (with linear location)
              All spaces of this group are only available for lorries -->
          <parkingRecord xsi:type="GroupOfParkingSites" id="BCC851F5-CB2E-4EF3-B8BA-02B71D3074E2" version="1">
            <parkingName>
              <values>
                <value>A345</value>
              </values>
            </parkingName>
            <parkingDescription>
              <values>
                <value lang="de">Reine LKW-Stellplätze entlang der A345</value>
              </values>
            </parkingDescription>
            <parkingRecordVersionTime>2014-01-04T18:13:51.0</parkingRecordVersionTime>
            <parkingNumberOfSpaces>1200</parkingNumberOfSpaces>
            <operator>
```

```

    <contactNotDefined>true</contactNotDefined>
  </operator>
  <parkingLocation xsi:type="Linear">
    <alertCLinear xsi:type="AlertCMethod4Linear">
      <alertCLocationCountryCode>D</alertCLocationCountryCode>
      <alertCLocationTableNumber>1</alertCLocationTableNumber>
      <alertCLocationTableVersion>13.0</alertCLocationTableVersion>
      <alertCDirection>
        <alertCDirectionCoded>positive</alertCDirectionCoded>
      </alertCDirection>
      <!-- dummy locations! -->
      <alertCMethod4PrimaryPointLocation>
        <alertCLocation>
          <specificLocation>1234</specificLocation>
        </alertCLocation>
        <offsetDistance>
          <offsetDistance>200</offsetDistance>
        </offsetDistance>
      </alertCMethod4PrimaryPointLocation>
      <alertCMethod4SecondaryPointLocation>
        <alertCLocation>
          <specificLocation>4567</specificLocation>
        </alertCLocation>
        <offsetDistance>
          <offsetDistance>100</offsetDistance>
        </offsetDistance>
      </alertCMethod4SecondaryPointLocation>
    </alertCLinear>
  </parkingLocation>
  <onlyAssignedParking>
    <vehicleCharacteristics>
      <vehicleType>lorry</vehicleType>
    </vehicleCharacteristics>
  </onlyAssignedParking>
</parkingRecord>

<!-- Single parking space for lorries.
There are two options: defining it within the group above or defining it seperated from the group - as it is done here. -->
<parkingRecord xsi:type="InterUrbanParkingSite" id="5CA55AA0-3A6E-4E8F-A0CE-9AF040B9463EB" version="1">
  <parkingName>
    <values>
      <value lang="en">Rastanlage Wald</value>
    </values>
  </parkingName>
  <parkingAlias>
    <values>
      <value lang="de">Wald West 127/xr8122443</value>
    </values>
  </parkingAlias>
  <parkingRecordVersionTime>2014-01-03T19:14:10.0</parkingRecordVersionTime>
  <parkingOccupanyDetectionType>balancing</parkingOccupanyDetectionType>
  <operator xsi:type="ContactDetails" id="5D237123-082B-4C65-B71D-BB2066070B85" version="1">
    <contactOrganisationName>
      <values>
        <value lang="de">LKW-Parken Betreiber GmbH</value>
      </values>
    </contactOrganisationName>
    <contactPersonName>Mustermann</contactPersonName>
    <contactPersonFirstName>Max</contactPersonFirstName>
  </operator>
</parkingRecord>

```

```
<contactDetailsTelephoneNumber>+49 234 56789</contactDetailsTelephoneNumber>  
<contactDetailsEMail>operator@muster-truckparking.de</contactDetailsEMail>  
<publishingAgreement>true</publishingAgreement>  
</operator>
```

```
<parkingLocation xsi:type="Point">  
  <!-- dummy values used here! -->  
  <alertCPoint xsi:type="AlertCMethod4Point">  
    <alertCLocationCountryCode>D</alertCLocationCountryCode>  
    <alertCLocationTableNumber>1</alertCLocationTableNumber>  
    <alertCLocationTableVersion>13.0</alertCLocationTableVersion>  
    <alertCDirection>  
      <alertCDirectionCoded>positive</alertCDirectionCoded>  
    </alertCDirection>  
    <alertCMethod4PrimaryPointLocation>  
      <alertCLocation>  
        <specificLocation>4567</specificLocation>  
      </alertCLocation>  
      <offsetDistance>  
        <offsetDistance>100</offsetDistance>  
      </offsetDistance>  
    </alertCMethod4PrimaryPointLocation>  
  </alertCPoint>  
  <pointByCoordinates>  
    <pointCoordinates>  
      <latitude>50.754432</latitude>  
      <longitude>6.020665</longitude>  
    </pointCoordinates>  
  </pointByCoordinates>  
  <pointExtension>  
    <pointExtended>  
      <junction>  
        <junctionName>  
          <values>  
            <value lang="de">Wald West</value>  
          </values>  
        </junctionName>  
        <junctionNumber>3</junctionNumber>  
        <motorway>  
          <roadIdentifier>  
            <values>  
              <value lang="de">A127</value>  
            </values>  
          </roadIdentifier>  
          <typeOfRoad>motorway</typeOfRoad>  
          <roadDestination>  
            <values>  
              <value lang="de">Musterstadt</value>  
            </values>  
          </roadDestination>  
          <distanceToThisRoad>50</distanceToThisRoad>  
        </motorway>  
      </junction>  
    </pointExtended>  
  </pointExtension>  
</parkingLocation>
```

```
<!-- Between 8 PM and 7 AM only lorries allowed -->  
<onlyAssignedParking>
```



```

<vehicleCharacteristics>
  <vehicleType>lorry</vehicleType>
</vehicleCharacteristics>
<timePeriodByHour>
  <startTimeOfPeriod>20:00:00</startTimeOfPeriod>
  <endTimeOfPeriod>07:00:00</endTimeOfPeriod>
</timePeriodByHour>
</onlyAssignedParking>

<!-- Tariffs are mandatory, even if the schema does not force this for technical reasons -->
<tariffsAndPayment>
  <reservationFee>0</reservationFee>
  <chargeBand id="EED2BA7E-9883-4062-954A-AC0B8C61151A" version="1">
    <!-- 10 Euros per 24 hours -->
    <chargeCurrency>eur</chargeCurrency>
    <charge>
      <charge>10</charge>
      <chargeInterval>86400</chargeInterval>
    </charge>
  </chargeBand>
  <acceptedPaymentCards>
    <paymentCards>creditCard</paymentCards>
    <paymentCardBrands>masterCard</paymentCardBrands>
    <paymentCardBrands>visa</paymentCardBrands>
  </acceptedPaymentCards>
</tariffsAndPayment>

<!-- Toilets (wheelchar accessible) and petrol station (brand name 'TankGut') no internet available -->
<parkingEquipmentOrServiceFacility equipmentOrServiceFacilityIndex="1">
  <parkingEquipmentOrServiceFacility xsi:type="Equipment">
    <availability>available</availability>
    <accessibility>wheelChairAccessible</accessibility>
    <equipmentType>toilet</equipmentType>
  </parkingEquipmentOrServiceFacility>
</parkingEquipmentOrServiceFacility>
<parkingEquipmentOrServiceFacility equipmentOrServiceFacilityIndex="2">
  <parkingEquipmentOrServiceFacility xsi:type="ServiceFacility">
    <availability>available</availability>
    <nameOrBrand>
      <values>
        <value lang="de">TankGut</value>
      </values>
    </nameOrBrand>
    <serviceFacilityType>petrolStation</serviceFacilityType>
  </parkingEquipmentOrServiceFacility>
</parkingEquipmentOrServiceFacility>
<parkingEquipmentOrServiceFacility equipmentOrServiceFacilityIndex="3">
  <parkingEquipmentOrServiceFacility xsi:type="Equipment">
    <availability>notAvailable</availability>
    <equipmentType>internetWireless</equipmentType>
  </parkingEquipmentOrServiceFacility>
</parkingEquipmentOrServiceFacility>

```

<!-- \* Group 1: 120 spaces for lorries

\* Group 2: Of these spaces above 3 are for heavy-haulage vehicles (not adjacent), every one at least 40m long and with 5m width.

(the fact, that the 3 spaces are part of the 120 is specified by the "realSubsetOfGroup" attribute).

\* One of these heavy-haulage vehicle spaces is described in more detail, among others mit (dummy) coordinates, cctv, but no dynamic truckParkingManagement.

This space has got an electric charging station and is 6,25m long and has got a width of 41,5m.

\* Group 3: There are no spaces for refrigerated goods transports.

-->

```

<groupOfParkingSpaces groupId="1">
  <parkingSpaceBasics xsi:type="GroupOfParkingSpaces">
    <parkingSpaceOrGroupIdentifier>
      <values>
        <value lang="de">LKW-Plätze</value>
      </values>
    </parkingSpaceOrGroupIdentifier>
    <assignedParkingAmongOthers>
      <vehicleCharacteristics>
        <vehicleType>lorry</vehicleType>
      </vehicleCharacteristics>
    </assignedParkingAmongOthers>
    <parkingNumberOfSpaces>120</parkingNumberOfSpaces>
    <parkingTypeOfGroup>statisticsOnly</parkingTypeOfGroup>
  </parkingSpaceBasics>
</groupOfParkingSpaces>
<groupOfParkingSpaces groupId="2">
  <parkingSpaceBasics xsi:type="GroupOfParkingSpaces">
    <parkingSpaceOrGroupIdentifier>
      <values>
        <value lang="de">Grossraumschwertransporte</value>
      </values>
    </parkingSpaceOrGroupIdentifier>
    <onlyAssignedParking>
      <vehicleCharacteristics>
        <vehicleCharacteristicsExtension>
          <vehicleCharacteristicsExtended>
            <vehicleType2>heavyHaulageVehicle</vehicleType2>
          </vehicleCharacteristicsExtended>
        </vehicleCharacteristicsExtension>
      </vehicleCharacteristics>
    </onlyAssignedParking>
    <parkingNumberOfSpaces>3</parkingNumberOfSpaces>
    <parkingTypeOfGroup>nonAdjacentSpaces</parkingTypeOfGroup>
    <realSubsetOfGroup>1</realSubsetOfGroup>
    <minimumParkingSpaceDimension>
      <dimensionLength>40</dimensionLength>
      <dimensionWidth>5</dimensionWidth>
    </minimumParkingSpaceDimension>
    <parkingSpace parkingSpaceIndex="1">
      <parkingSpace>
        <parkingSpaceOrGroupIdentifier>
          <values>
            <value lang="en">Stellplatz No. 1 für Grossraumschwertransport</value>
          </values>
        </parkingSpaceOrGroupIdentifier>
        <accessibility>barrierFreeAccessible</accessibility>
        <parkingSpacePhysics>driveThrough</parkingSpacePhysics>
        <parkingSpacePhysics>openAir</parkingSpacePhysics>
        <parkingMode>parallelParking</parkingMode>
        <parkingReservation>notAvailable</parkingReservation>
        <distanceFromPrimaryRoad>500</distanceFromPrimaryRoad>
        <parkingOccupancyDetectionType>singleSpaceDetection</parkingOccupancyDetectionType>
        <parkingSecurity>cctv</parkingSecurity>
        <parkingEquipmentOrServiceFacility equipmentOrServiceFacilityIndex="4">
          <parkingEquipmentOrServiceFacility xsi:type="Equipment">

```

```

        <availability>available</availability>
        <equipmentType>electricChargingStation</equipmentType>
    </parkingEquipmentOrServiceFacility>
</parkingEquipmentOrServiceFacility>
    <parkingUsageScenario scenarioIndex="1">
        <parkingUsageScenario>
            <parkingUsageScenario>truckParking</parkingUsageScenario>
        </parkingUsageScenario>
    </parkingUsageScenario>
</truckParkingDynamicManagement>noDynamicParkingManagement</truckParkingDynamicManagement>
    </parkingUsageScenario>
</parkingUsageScenario>
    <location xsi:type="Point">
        <locationForDisplay>
            <latitude>50.854432</latitude>
            <longitude>6.40665</longitude>
        </locationForDisplay>
    </location>
    <parkingSpaceDimension>
        <dimensionLength>41.5</dimensionLength>
        <dimensionWidth>6.25</dimensionWidth>
    </parkingSpaceDimension>
</parkingSpace>
</parkingSpace>
</parkingSpaceBasics>
</groupOfParkingSpaces>
<groupOfParkingSpaces groupIndex="3">
    <parkingSpaceBasics xsi:type="GroupOfParkingSpaces">
        <parkingSpaceOrGroupIdentifier>
            <values>
                <value lang="de">Keine Stellplätze für Kühltransporte</value>
            </values>
        </parkingSpaceOrGroupIdentifier>
        <assignedParkingAmongOthers>
            <vehicleCharacteristics>
                <vehicleCharacteristicsExtension>
                    <vehicleCharacteristicsExtended>
                        <loadType2>refrigeratedGoods</loadType2>
                    </vehicleCharacteristicsExtended>
                </vehicleCharacteristicsExtension>
            </vehicleCharacteristics>
        </assignedParkingAmongOthers>
        <parkingNumberOfSpaces>0</parkingNumberOfSpaces>
        <parkingTypeOfGroup>statisticsOnly</parkingTypeOfGroup>
    </parkingSpaceBasics>
</groupOfParkingSpaces>

    <!-- Above 130 vehilces, the site is specified as being overcrowded -->
    <parkingThresholds>
        <overcrowding>130</overcrowding>
    </parkingThresholds>

    <!-- The parking site / rest area is located in a wider area - here: Germany (by ALERT-C code); a marker is defined for
Berlin.
    This is just an example; the entire area can be defined as anything else, for example some county, some individual
polygon or a Truck Parking Priority Zone. -->
    <entireArea>
        <locationForDisplay>
            <latitude>52.518611</latitude>
            <longitude>13.408333</longitude>

```

```
</locationForDisplay>
<alertCArea>
  <alertCLocationCountryCode>D</alertCLocationCountryCode>
  <alertCLocationTableNumber>1</alertCLocationTableNumber>
  <alertCLocationTableVersion>13.0</alertCLocationTableVersion>
  <areaLocation>
    <alertCLocationName>
      <values>
        <value lang="de">Deutschland</value>
      </values>
    </alertCLocationName>
    <specificLocation>1</specificLocation>
  </areaLocation>
</alertCArea>
</entireArea>

<!-- Address of the site, mit with housenumber range 12-42 -->
<parkingSiteAddress xsi:type="ContactDetails" id="5A4E4C52-B16A-4558-8C56-1CFB847D6EE2" version="1">
  <contactDetailsStreet>Musterstraße</contactDetailsStreet>
  <contactDetailsHouseNumber>12</contactDetailsHouseNumber>
  <contactDetailsHouseNumber>42</contactDetailsHouseNumber>
  <contactDetailsPostcode>12345</contactDetailsPostcode>
  <contactDetailsCity>
    <values>
      <value lang="de">Musterstadt</value>
    </values>
  </contactDetailsCity>
  <country>de</country>
</parkingSiteAddress>

<!-- It's mandatory to provide the truckParking literal -->
<parkingUsageScenario scenarioIndex="2">
  <parkingUsageScenario>
    <parkingUsageScenario>truckParking</parkingUsageScenario>
    <truckParkingDynamicManagement>queueParking</truckParkingDynamicManagement>
  </parkingUsageScenario>
</parkingUsageScenario>
<parkingUsageScenario scenarioIndex="3">
  <parkingUsageScenario>
    <parkingUsageScenario>restArea</parkingUsageScenario>
  </parkingUsageScenario>
</parkingUsageScenario>

<!-- access via A127 -->
<parkingAccess id="5CA55AA0-3A6E-4E8F-A0CE-9AF040B9463E">
  <accessCategory>vehicleEntrance</accessCategory>
  <primaryRoad>
    <roadIdentifier>
      <values>
        <value lang="en">A127</value>
      </values>
    </roadIdentifier>
    <roadDestination>
      <values>
        <value lang="en">Musterstadt</value>
      </values>
    </roadDestination>
  </primaryRoad>
  <location xsi:type="Point">
```

```

<!-- dummy values used here -->
<alertCPoint xsi:type="AlertCMethod4Point">
  <alertCLocationCountryCode>D</alertCLocationCountryCode>
  <alertCLocationTableNumber>1</alertCLocationTableNumber>
  <alertCLocationTableVersion>13.0</alertCLocationTableVersion>
  <alertCDirection>
    <alertCDirectionCoded>positive</alertCDirectionCoded>
  </alertCDirection>
  <alertCMethod4PrimaryPointLocation>
    <alertCLocation>
      <specificLocation>4567</specificLocation>
    </alertCLocation>
    <offsetDistance>
      <offsetDistance>100</offsetDistance>
    </offsetDistance>
  </alertCMethod4PrimaryPointLocation>
</alertCPoint>
<pointByCoordinates>
  <pointCoordinates>
    <latitude>50.854432</latitude>
    <longitude>6.120665</longitude>
  </pointCoordinates>
</pointByCoordinates>
</location>
</parkingAccess>

<parkingStandardsAndSecurity>
  <parkingSecurity>socialControl</parkingSecurity>
  <parkingSecurity>cctv</parkingSecurity>
  <parkingSecurity>dog</parkingSecurity>
  <parkingSecurityNationalClassification>
    <values>
      <value lang="de">5</value>
    </values>
  </parkingSecurityNationalClassification>
</parkingStandardsAndSecurity>

<interUrbanParkingSiteLocation>motorway</interUrbanParkingSiteLocation>

</parkingRecord>
</parkingTable>
</parkingTablePublication>
</genericPublicationExtension>
</payloadPublication>
</d2LogicalModel>

```

## J.2 ParkingStatusPublication for Truck Parking

### J.2.1 Overview

The following XML code validates against the DATEX II Truck Parking profile specified in normative Annex A and represents the following:

- Dynamic data for the static Truck Parking publication from Clause J.1.
- Reference to the table and to the Truck Parking site above.
- There is no queueing time, but snow chains are required.
- Parking space #1 (one of the heavy haulage vehicle places) is occupied right now. The sensor to detect this issue was last calibrated in October 2014.
- There are 103 free spaces, 20 vehicles are parking. The trend is stable.
- The vehicle rates described below in the next three bullet points are covering the petrol station area, too. They are valid for the complete Truck Parking site.
- Data from 9:05 AM: Within the last 5 minutes, 20 vehicles (of type 'all vehicles') came in, 19 left. There is an error probability for these two values of 0,01 %. There's one more space occupied than 5 minutes ago.
- Within the last 30 minutes, 200 vehicles came in, 1109 left. There is an error probability for these two values of 0,01 %, but an error was detected on the latter value with description "Value too high". The occupancy is 6 vehicles lower than 30 minutes ago.
- Data from 9:00 AM: There was a vehicle fill rate of 7 lorries per hour and an exit rate of 8 lorries per hour.
- There are 101 free spaces for lorries, 19 are occupied. The fill grade for lorries is 20% (the item "lorry" was defined in the static model for group #1).
- Group #2, the heavy haulage vehicle spaces: There was no incoming vehicle (= heavy haulage vehicle) within the last 30 minutes.
- Group #3, spaces for refrigerated goods vehicles: Parking is not allowed (which is obvious, as there are 0 parking spaces in this group).
- Equipment #2, the toilets for handicapped people: The number of these toilets is reduced to 1 (maybe the other toilet is defect).

NOTE In addition, it is also possible to communicate the status of currently vacant toilets. Of course, this does only make sense when using a very short interval of messages.

- On the Truck Parking site, there are currently spaces available.

## J.2.2 XML representation

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel xmlns="http://datex2.eu/schema/2/2_0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://datex2.eu/schema/2/2_0 TruckParkingStatusPublication.xsd" modelBaseVersion="2">
  <exchange>
    <supplierIdentification>
      <country>de</country>
      <nationalIdentifier>xxxxxxxxxxxx</nationalIdentifier>
    </supplierIdentification>
  </exchange>
```

```

<payloadPublication xsi:type="GenericPublication" lang="en">
  <publicationTime>2014-01-15T09:05:29.0</publicationTime>
  <publicationCreator>
    <country>de</country>
    <nationalIdentifier>xxxxxxxxxxxx</nationalIdentifier>
  </publicationCreator>
  <genericPublicationName>ParkingStatusPublication</genericPublicationName>
  <genericPublicationExtension>
    <parkingStatusPublication>
      <parkingTableReference targetClass="ParkingTable" id="8E580AC1-4B1B-4205-81A2-E321F207F648B" version="3"/>
      <parkingRecordStatus xsi:type="ParkingSiteStatus">
        <parkingRecordReference targetClass="ParkingRecord" id="5CA55AA0-3A6E-4E8F-A0CE-9AF040B9463EB"
version="1"/>
        <parkingStatusOriginTime>2014-01-15T09:05:00.0</parkingStatusOriginTime>
        <winterEquipmentManagementType>useSnowChains</winterEquipmentManagementType>
        <parkingSpaceStatus parkingSpaceIndex="1">
          <parkingSpaceStatus>
            <parkingSpaceOccupied>true</parkingSpaceOccupied>
            <lastCalibration>2013-12-30T12:00:00</lastCalibration>
          </parkingSpaceStatus>
        </parkingSpaceStatus>
        <parkingOccupancy>
          <parkingNumberOfVacantSpaces>103</parkingNumberOfVacantSpaces>
          <parkingNumberOfVehicles>20</parkingNumberOfVehicles>
          <parkingOccupancyTrend>stable</parkingOccupancyTrend>
          <vehicleCountAndRate>
            <measurementTimeDefault>2014-01-15T09:05:00.0</measurementTimeDefault>
            <coveringPetrolStationArea>true</coveringPetrolStationArea>
            <vehicleCountWithinInterval>
              <measurementInterval>5</measurementInterval>
              <numberOfIncomingVehicles accuracy="0.01">
                <vehicleCount>20</vehicleCount>
              </numberOfIncomingVehicles>
              <numberOfOutgoingVehicles accuracy = "0.01">
                <vehicleCount>19</vehicleCount>
              </numberOfOutgoingVehicles>
              <changeOfOccupiedSpaces>
                <occupancyChange>1</occupancyChange>
              </changeOfOccupiedSpaces>
              <countedVehicles>
                <vehicleType>lorry</vehicleType>
              </countedVehicles>
            </vehicleCountWithinInterval>
            <vehicleCountWithinInterval>
              <measurementInterval>30</measurementInterval>
              <numberOfIncomingVehicles accuracy="0.01">
                <vehicleCount>200</vehicleCount>
              </numberOfIncomingVehicles>
              <numberOfOutgoingVehicles accuracy = "0.01">
                <dataError>true</dataError>
                <reasonForDataError>
                  <values>
                    <value lang="en">Value to high.</value>
                  </values>
                </reasonForDataError>
              <vehicleCount>1109</vehicleCount>
            </numberOfOutgoingVehicles>
            <changeOfOccupiedSpaces>
              <occupancyChange>-6</occupancyChange>
            </changeOfOccupiedSpaces>
          </vehicleCountAndRate>
        </parkingOccupancy>
      </parkingStatusPublication>
    </genericPublicationExtension>
  </payloadPublication>

```

```
</changeOfOccupiedSpaces>
<countedVehicles>
  <vehicleType>lorry</vehicleType>
</countedVehicles>
</vehicleCountWithinInterval>
<vehicleRate>
  <measurementOrCalculationTime>2014-01-15T09:00:00.0</measurementOrCalculationTime>
  <fillRate>
    <vehicleFlowRate>7</vehicleFlowRate>
  </fillRate>
  <exitRate>
    <vehicleFlowRate>8</vehicleFlowRate>
  </exitRate>
  <measuredVehicles>
    <vehicleType>lorry</vehicleType>
  </measuredVehicles>
</vehicleRate>
</vehicleCountAndRate>
</parkingOccupancy>
<groupOfParkingSpacesStatus groupIndex="1">
  <groupOfParkingSpacesStatus>
    <parkingNumberOfVacantSpaces>101</parkingNumberOfVacantSpaces>
    <parkingNumberOfOccupiedSpaces>19</parkingNumberOfOccupiedSpaces>
    <parkingOccupancyGraded>percentage20</parkingOccupancyGraded>
  </groupOfParkingSpacesStatus>
</groupOfParkingSpacesStatus>
<groupOfParkingSpacesStatus groupIndex="2">
  <groupOfParkingSpacesStatus>
    <vehicleCountAndRate>
      <vehicleCountWithinInterval>
        <measurementInterval>30</measurementInterval>
        <numberOfIncomingVehicles>
          <vehicleCount>0</vehicleCount>
        </numberOfIncomingVehicles>
      </vehicleCountWithinInterval>
    </vehicleCountAndRate>
  </groupOfParkingSpacesStatus>
</groupOfParkingSpacesStatus>
<groupOfParkingSpacesStatus groupIndex="3">
  <groupOfParkingSpacesStatus>
    <parkingNotAllowed>true</parkingNotAllowed>
  </groupOfParkingSpacesStatus>
</groupOfParkingSpacesStatus>
<overrideParkingThresholds>
  <overcrowding>140</overcrowding>
</overrideParkingThresholds>
<parkingSiteStatus>spacesAvailable</parkingSiteStatus>
<parkingSiteOpeningStatus>open</parkingSiteOpeningStatus>
</parkingRecordStatus>
</parkingStatusPublication>
</genericPublicationExtension>
</payloadPublication>
</d2LogicalModel>
```



### J.3 ParkingStatusPublication for Truck Parking (“Easter Sunday”)

#### J.3.1 Overview

The following XML code validates against the DATEX II Truck Parking profile specified in normative Annex A and represents the following:

- Dynamic data for the static Truck Parking publication from Clause J.1.
- Reference to the table and to the Truck Parking site above.
- The complete information is a prognosis for Easter Sunday (21.04.2019)
- The parking will be full, there will be no spaces available, the queueing time will be about 2 hours (7200 seconds).

#### J.3.2 XML representation

```
<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel xmlns="http://datex2.eu/schema/2/2_0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://datex2.eu/schema/2/2_0 TruckParkingStatusPublication.xsd"
modelBaseVersion="2">

  <!-- This messages gives a prognosis for easter sunday, 21/04/2019: there will be no more spaces
  (parkingNumberOfVacantSpaces = 0 and parkingFacilityStatus = full) -->
  <exchange>
    <supplierIdentification>
      <country>de</country>
      <nationalIdentifier>xxxxxxxxxxxx</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="GenericPublication" lang="en">
    <publicationTime>2014-01-15T09:05:29.0</publicationTime>
    <publicationCreator>
      <country>de</country>
      <nationalIdentifier>xxxxxxxxxxxx</nationalIdentifier>
    </publicationCreator>
    <genericPublicationName>ParkingStatusPublication</genericPublicationName>
    <genericPublicationExtension>
      <parkingStatusPublication>
        <parkingTableReference targetClass="ParkingTable" id="8E580AC1-4B1B-4205-81A2-
E321F207F648B" version="3"/>
        <parkingRecordStatus xsi:type="ParkingSiteStatus">
          <parkingRecordReference targetClass="ParkingRecord" id="5CA55AA0-3A6E-4E8F-A0CE-
9AF040B9463EB" version="1"/>
          <parkingStatusOriginTime>2014-01-15T09:05:00.0</parkingStatusOriginTime>
          <parkingOccupancy>
            <parkingNumberOfVacantSpaces>0</parkingNumberOfVacantSpaces>
          </parkingOccupancy>
          <parkingStatusValidity>
            <validityTimeSpecification>
              <overallStartTime>2019-04-21T00:00:00</overallStartTime>
              <overallEndTime>2019-04-22T00:00:00</overallEndTime>
            </validityTimeSpecification>
          </parkingStatusValidity>
          <parkingSiteStatus>full</parkingSiteStatus>
          <parkingSiteOpeningStatus>openingTimesInForce</parkingSiteOpeningStatus>
        </parkingRecordStatus>
      </parkingStatusPublication>
    </genericPublicationExtension>
  </payloadPublication>
</d2LogicalModel>
```

</parkingStatusPublication>  
</genericPublicationExtension>  
</payloadPublication>  
</d2LogicalModel>

DRAFT

## J.4 ParkingTablePublication

### J.4.1 Overview

The following XML code validates against the DATEX II Parking Publications model specified in Clauses 8 and 9 and represents the following:

- One parking table, consisting of one group of parking sites and one special location parking site.
- The group of parkingsites contains another urban parking site  
 (i.e. there are two parking sites defined, one is part of the group, the other not. Note that the parking site that is part of the group is denoted at first in the XML. The group may contain further parking sites, which do not necessarily need to be specified in the XML).
- The group of parking sites has got a name, an alias name and a description.
- It's location is given only by a named area ("Some City Western Part").
- The color "Blue" is allocated to this group of parking sites (for guidance systems, maps, etc).
- The group of parking sites is 3000 x 1000 metres wide.
- The urban parking site is an off street parking with a name and 60 spaces.
- The principal number of spaces is 0, because it is designed for long term parkers only and is prohibited for short term parkers (i.e. there are no spaces for passing by vehicles).
- There's an E-Mail address of the owner. The owner is not available 24 hours a day.
- It exists a named parking route with icon index 3 (internal usage) and blue colour associated for this parking site.
- The location is specified by reference of a predefined itinerary (not included in the examples).
- Long term parkers may pay a flat fee of 80 Euros per month (2592000 seconds) with a prepaid token.
- Smoking is allowed only outside the building.
- It's a multi-storey parking on the floors 1 and 2.
- There exists a visual guidance system inside the building (i.e. some electronical system which helps drivers to find free spaces).
- The special location parking site is a temporary parking site on a field adjacent to a theme park. It has got 300 places.
- The location is given by a reference to a predefined location (not included in the examples).

Note that a corresponding dynamic message is not provided in the example.

## J.4.2 XML representation

```

<?xml version="1.0" encoding="UTF-8"?>
<d2LogicalModel xmlns="http://datex2.eu/schema/2/2_0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://datex2.eu/schema/2/2_0 UrbanParkingTablePublication.xsd" modelBaseVersion="2">
  <exchange>
    <supplierIdentification>
      <country>de</country>
      <nationalIdentifier>someNationalIdentifier</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="GenericPublication" lang="en">
    <publicationTime>2014-01-01T09:00:00.0</publicationTime>
    <publicationCreator>
      <country>de</country>
      <nationalIdentifier>someNationalIdentifier</nationalIdentifier>
    </publicationCreator>
    <genericPublicationName>ParkingTablePublication</genericPublicationName>
    <genericPublicationExtension>
      <parkingTablePublication>
        <parkingTable id="6DFFAFA1-51C4-483E-84DA-7A947CA90B8D" version="1">
          <parkingTableName>
            <values>
              <value lang="en">someParkingTableName</value>
            </values>
          </parkingTableName>
          <parkingTableVersionTime>2014-01-04T17:01:00.0</parkingTableVersionTime>
          <parkingRecord xsi:type="GroupOfParkingSites" id="8BA141D7-205A-462D-9503-C4F8537D71E3" version="1">
            <parkingName>
              <values>
                <value lang="en">The name of the parking area.</value>
              </values>
            </parkingName>
            <parkingAlias>
              <values>
                <value lang="en">Another name for the parking area.</value>
              </values>
            </parkingAlias>
            <parkingDescription>
              <values>
                <value lang="en">This is an aggregation of the two parking facilities with are part of this parking area.</value>
              </values>
            </parkingDescription>
            <parkingRecordVersionTime>2014-01-01T08:55:00.0</parkingRecordVersionTime>
            <parkingLocation xsi:type="Area">
              <areaExtension>
                <areaExtended>
                  <namedArea>
                    <country>gb</country>
                    <areaName>
                      <values>
                        <value>Some City Western Part</value>
                      </values>
                    </areaName>
                  </namedArea>
                </areaExtended>
              </areaExtension>
            </parkingLocation>
          </parkingRecord>
        </parkingTable>
      </parkingTablePublication>
    </genericPublicationExtension>
  </payloadPublication>
</d2LogicalModel>

```

```

<parkingColour>
  <rgbRedValue>0</rgbRedValue>
  <rgbGreenValue>0</rgbGreenValue>
  <rgbBlueValue>204</rgbBlueValue>
  <colourName>
    <values>
      <value lang="en">Blue</value>
      <value lang="de">Blau</value>
    </values>
  </colourName>
</parkingColour>
<parkingRecordDimension>
  <dimensionLength>3000</dimensionLength>
  <dimensionWidth>1000</dimensionWidth>
</parkingRecordDimension>
<parkingSite xsi:type="UrbanParkingSite" id="519D95DF-1EEF-4A27-A9B1-6376C3869881" version="1">
  <parkingName>
    <values>
      <value lang="en">Multistorey Car Park West</value>
    </values>
  </parkingName>
  <parkingRecordVersionTime>2014-01-03T19:02:00.0</parkingRecordVersionTime>
  <parkingNumberOfSpaces>60</parkingNumberOfSpaces>
  <parkingPrincipalNumberOfSpaces>0</parkingPrincipalNumberOfSpaces>
  <owner xsi:type="ContactDetails" id="91F53B90-E9B9-4C70-B068-DDBBC26C1C97" version="1">
    <contactDetailsEMail>owner@carParkWest.com</contactDetailsEMail>
    <available24hours>>false</available24hours>
  </owner>
  <parkingLocation xsi:type="Point">
    <pointByCoordinates>
      <pointCoordinates>
        <latitude>50.84444</latitude>
        <longitude>6.122324</longitude>
      </pointCoordinates>
    </pointByCoordinates>
  </parkingLocation>
  <parkingRoute xsi:type="ParkingRouteDetails" id="24F5F4E7-FA54-4669-ACC3-0EFE55B5BCE5" version="2">
    <parkingRouteColour>
      <rgbRedValue>0</rgbRedValue>
      <rgbGreenValue>0</rgbGreenValue>
      <rgbBlueValue>204</rgbBlueValue>
    </parkingRouteColour>
    <parkingRouteName>
      <values>
        <value lang="en">Route to car park west</value>
      </values>
    </parkingRouteName>
    <parkingRouteIconIndex>3</parkingRouteIconIndex>
    <groupOfLocations xsi:type="ItineraryByReference">
      <predefinedItineraryReference targetClass="PredefinedItinerary" id="AC024F63-CE9F-4508-B241-F3E0AD3C39CD" version="2"/>
    </groupOfLocations>
  </parkingRoute>
  <onlyAssignedParking>
    <applicableForUser>longTermParker</applicableForUser>
  </onlyAssignedParking>
  <prohibitedParking>
    <applicableForUser>shortTermParker</applicableForUser>
  </prohibitedParking>

```

```

<tariffsAndPayment>
  <paymentMode>payByPrepaidToken</paymentMode>
  <reservationFee>0</reservationFee>
  <chargeBand id="75889FB9-C019-4BF1-97FC-EABAC253FFFB" version="5">
    <chargeCurrency>eur</chargeCurrency>
    <applicableForUser>longTermParker</applicableForUser>
    <charge>
      <charge>80</charge>
      <chargeInterval>2592000</chargeInterval>
      <chargeType>flat</chargeType>
    </charge>
  </chargeBand>
</tariffsAndPayment>
<permitsAndProhibitions>
  <activity>smoking</activity>
  <regulation>onlyOutsideBuildings</regulation>
</permitsAndProhibitions>
<parkingLayout>multiStorey</parkingLayout>
<highestFloor>2</highestFloor>
<lowestFloor>1</lowestFloor>
<parkingUsageScenario scenarioIndex="1">
  <parkingUsageScenario>
    <parkingUsageScenario>automaticParkingGuidance</parkingUsageScenario>
  </parkingUsageScenario>
</parkingUsageScenario>
<urbanParkingSiteType>offStreetParking</urbanParkingSiteType>
</parkingSite>
</parkingRecord>
<parkingRecord xsi:type="SpecialLocationParkingSite" id="B5C33835-C985-4796-8EB0-A4AEE6B3DEFC" version="1">
  <parkingRecordVersionTime>2014-01-02T07:01:23.0</parkingRecordVersionTime>
  <parkingNumberOfSpaces>300</parkingNumberOfSpaces>
  <parkingLocation xsi:type="LocationByReference">
    <predefinedLocationReference targetClass="PredefinedLocation" id="61205B65-5A34-4E48-ABC2-71375C9F5B12"
version="1"/>
  </parkingLocation>
  <parkingLayout>field</parkingLayout>
  <temporaryParking>true</temporaryParking>
  <parkingSpecialLocation>themePark</parkingSpecialLocation>
</parkingRecord>
</parkingTable>
</parkingTablePublication>
</genericPublicationExtension>
</payloadPublication>
</d2LogicalModel>

```

## Bibliography

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- [2] LABEL Security Criteria, Version 18-10-2010 RLE1, LABEL project <http://truckparkinglabel.eu>
- [3] LABEL Service Criteria, Version 18-10-2010 RLE1, LABEL project <http://truckparkinglabel.eu>
- [4] CEN/TS 16157-4, *Intelligent transport systems - DATEX II data exchange specifications for traffic management and information – Part 4: Variable Message Sign (VMS) Publications*
- [5] CEN/TS 16157-5, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 5: Measured and elaborated data publications*
- [6] ISO 4217:2008 - *Codes for the representation of currencies and funds*