DATEX II profile for Intelligent Truck Parking EU compliant – Static part

ASFINAG

Version 00-02-00

A.1 Overview

ASFINAG provides DATEX II traffic information of Austrian motorways for service providers and other interested institutions. This profile describes the message content for the Static Part of Intelligent Truck Parking. It is limited to elements that are specified in the corresponding EU Regulation 885/2013 (including a very little set of further optional elements that make the profile smoothly) as well as some more optional elements selected by ASFINAG.

The DATEX standard location referencing methods are not included in this document. ASFINAG specific documentation is accentuated in colour.

A.2 Data Dictionary for "ASFINAG Intelligent Truck Parking EU compliant - Static Part"

A.2.1 "GenericPublication" package

A.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 1— Classes of the "GenericPublication" package

A.2.1.2 "GenericPublication" package association roles

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

A.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 2— Attributes of the "GenericPublication" package

A.2.2 "OpeningTimes" package

ASFINAG provides this information in excess of the information enforced by the EU Regulation.

A.2.2.1 "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

Table 3— Classes of the "OpeningTimes" package

A.2.2.2 "OpeningTimes" package association roles

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

A.2.2.3 "OpeningTimes" package attributes

There are no defined attributes in the "OpeningTimes" package.

A.2.3 "ParkingAccess" package

A.2.3.1 "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 4— Classes of the "ParkingAccess" package

A.2.3.2 "ParkingAccess" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ParkingAccess	primaryRoad	Primary road	Identification for up to two primary roads located nearby the access or which make the parking accessible.	1..*	Road

Table 5— Associations of the "ParkingAccess" package

A.2.3.3 "ParkingAccess" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingAccess	accessCategory	Access category	Specifies the category(s) of this access.	1..*	AccessCategory Enum

Table 6— Attributes of the "ParkingAccess" package

A.2.4 "ParkingEquipmentOrServiceFacility" package

A.2.4.1 "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 7— Classes of the "ParkingEquipmentOrServiceFacility" package

A.2.4.2 "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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	OpeningTimes

Table 8— Associations of the "ParkingEquipmentOrServiceFacility" package

A.2.4.3 "ParkingEquipmentOrServiceFacility" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ElectricCharging	chargingStationUsageType	Charging station usage type	Usage type of the electric charging station(s).	1..*	ChargingStationUsageTypeEnum
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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..*	AccessibilityEnum
	additionalDescription	Additional description	Provides an additional description.	0..1	MultilingualString
	availability	Availability	Specifies, if the element in question is available or not. Note that this is no dynamic information!	0..1	AvailabilityEnum
	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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	MultilingualString
	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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	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 9— Attributes of the "ParkingEquipmentOrServiceFacility" package

A.2.5 "ParkingRecord" package

A.2.5.1 "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

Table 10— Classes of the "ParkingRecord" package

A.2.5.2 "ParkingRecord" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
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
	entireArea	Entire area	An underlaying 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
	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
	operator	Operator	Contact details of the operator of the parking facility.	1..*	Contact
	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	GroupOfLocations
	prohibitedParking	Prohibited parking	Parking is not allowed for the given assignment.	0..1	ParkingAssignment

Table 11— Associations of the "ParkingRecord" package

A.2.5.3 **"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	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
	contactDetailsEMail	Contact details e mail	E-Mail address 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
	contactDetailsPostcode	Contact details postcode	Postcode of the contact.	0..1	String
	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
	country	Country	ISO 3166-1 two character country code.	0..1	CountryEnum
	publishingAgreement	Publishing agreement	Indication, whether the contact accepted publishing its contact information.	0..1	Boolean
ParkingRecord	parkingAlias	Parking alias	Alternative name for the parking site or the group of parking sites.	0..*	MultilingualString

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	parkingName	Parking name	Name of the parking, i.e. name of the parking site or the group of parking sites.	1..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
	parkingRecordVersionTime	Parking record version time	Date/time that this version of the parking record was defined.	1..1	DateTime

Table 12— Attributes of the "ParkingRecord" package

A.2.6 "ParkingSite" package

A.2.6.1 "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

Table 13— Classes of the "ParkingSite" package

A.2.6.2 "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.	1..*	Contact

Table 14— Associations of the "ParkingSite" package

A.2.6.3 "ParkingSite" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
InterUrbanParkingSite	interUrbanParkingSite Location	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
ParkingUsageScenario	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

Table 15— Attributes of the "ParkingSite" package

A.2.7 "ParkingSpace" package

A.2.7.1 "ParkingSpace" package classes

Class name	Designation	Definition	Stereotype	Abstract
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

Table 16— Classes of the "ParkingSpace" package

A.2.7.2 "ParkingSpace" package association roles

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

A.2.7.3 "ParkingSpace" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GroupOfParkingSpaces	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

Table 17— Attributes of the "ParkingSpace" package

A.2.8 "ParkingSpaceBasics" package

A.2.8.1 "ParkingSpaceBasics" package classes

Class name	Designation	Definition	Stereotype	Abstract
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
ParkingSpaceBasics	Parking space basics	Common properties of parking spaces and groups of parking spaces.		Yes

Table 18— Classes of the "ParkingSpaceBasics" package

A.2.8.2 "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 19— Associations of the "ParkingSpaceBasics" package

A.2.8.3 "ParkingSpaceBasics" package attributes

There are no defined package attributes in the "ParkingSpaceBasics" package.

A.2.9 "ParkingStandardsAndSecurity" package

A.2.9.1 "ParkingStandardsAndSecurity" package classes

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

Table 20— Classes of the "ParkingStandardsAndSecurity" package

A.2.9.2 "ParkingStandardsAndSecurity" package association roles

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

A.2.9.3 "ParkingStandardsAndSecurity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
ParkingStandardsAnd Security	certifiedSecureParking	Certified secure parking	Presence of a certification for secure parking.	0..1	Boolean
	dateOfCertification	Date of certification	Date of certification.	0..1	Date
	parkingAdditionalSecu rity	Parking additional security	Security equipment of the parking site that is not covered by the enumeration 'ParkingSecurityEnum'.	0..*	MultilingualStrin g
	parkingSecurity	Parking security	Specifies security measures related to the parking site or particular spaces.	0..*	ParkingSecurity Enum
	parkingSecurityNation alClassification	Parking security national classification	A national classification of the parking security.	0..1	MultilingualStrin g
	parkingSupervision	Parking supervision	Defines the kind of supervision of the parking site.	0..*	ParkingSupervis ionEnum

Table 21— Attributes of the "ParkingStandardsAndSecurity" package

A.2.10 "ParkingTablePublication" package

A.2.10.1 "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 22— Classes of the "ParkingTablePublication" package

A.2.10.2 "ParkingTablePublication" package association roles

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

A.2.10.3 "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
	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 23— Attributes of the "ParkingTablePublication" package

A.2.11 "Road" package

A.2.11.1 "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 junctionon on this road.		No

Table 24— Classes of the "Road" package

A.2.11.2 "Road" package association roles

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

A.2.11.3 "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
	roadDestination	Road destination	Name of some city, area, compass direction or other identification the road is leading to (to determine the direction in question).	1..*	MultilingualString
	roadIdentifier	Road identifier	Identifier/number of the road.	1..1	MultilingualString
	typeOfRoad	Type of road	Type of the road. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	RoadTypeEnum
RoadNode	junctionName	Junction name	Name of the junction.	1..1	MultilingualString

Table 25— Attributes of the "Road" package

A.2.12 "TariffsAndPayment" package

A.2.12.1 "TariffsAndPayment" package classes

Class name	Designation	Definition	Stereotype	Abstract
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 26— Classes of the "TariffsAndPayment" package

A.2.12.2 "TariffsAndPayment" package association roles

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

A.2.12.3 "TariffsAndPayment" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
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
	chargeTypeDescription	Charge type description	Additional description for this kind of charge type, especially if the enumeration does not fit.	0..1	MultilingualString
ChargeBand	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
ChargeBandByReference	chargeBandReference	Charge band reference	A reference to a charge band.	1..1	VersionedReference
TariffsAndPayment	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

Table 27— Attributes of the "TariffsAndPayment" package

A.2.13 "TimePeriodOfDay" package

A.2.13.1 "TimePeriodOfDay" package classes

Class name	Designation	Definition	Stereotype	Abstract
TimePeriodByHour	Time period by hour	Specification of a continuous period within a 24 hour period by times.		No
TimePeriodOfDay	Time period of day	Specification of a continuous period of time within a 24 hour period.		Yes

Table 28— Classes of the "TimePeriodOfDay" package

A.2.13.2 "TimePeriodOfDay" package association roles

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

A.2.13.3 "TimePeriodOfDay" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
TimePeriodByHour	endTimeOfPeriod	End time of period	End of time period.	1..1	Time
	startTimeOfPeriod	Start time of period	Start of time period.	1..1	Time

Table 29— Attributes of the "TimePeriodOfDay" package

A.2.14 "Validity" package

A.2.14.1 "Validity" package classes

Class name	Designation	Definition	Stereotype	Abstract
DayWeekMonth	Day week month	Specification of periods defined by the intersection of days, weeks and months.		no
OverallPeriod	Overall period	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).		no
Period	Period	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.		no
Validity	Validity	Specification of validity, either explicitly or by a validity time period specification which may be discontinuous.		no

Table 30— Classes of the "Validity" package

A.2.14.2 "Validity" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
OverallPeriod	validPeriod	Valid period	A single time period, a recurring time period or a set of different recurring time periods during which validity is true.	0..*	Period
Period	recurringDayWeekMonthPeriod	Recurring day week month period	A recurring period defined in terms of days of the week, weeks of the month and months of the year.	0..*	DayWeekMonth
	recurringTimePeriodOfDay	Recurring time period of day	A recurring period of a day.	0..*	TimePeriodOfDay
Validity	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).	1..1	OverallPeriod

Table 31— Associations of the "Validity" package

A.2.14.3 "Validity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
DayWeekMonth	applicableDay	Applicable day	Applicable day of the week. "All days of the week" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..7	DayEnum
	applicableMonth	Applicable month	Applicable month of the year. "All months of the year" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..12	MonthOfYearEnum
	applicableWeek	Applicable week	Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..5	WeekOfMonthEnum
OverallPeriod	overallEndTime	Overall end time	End of bounding period of validity defined by date and time. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
	overallStartTime	Overall start time	Start of bounding period of validity defined by date and time. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	1..1	DateTime
Period	endOfPeriod	End of period	End of a period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
	periodName	Period name	The name of the period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	MultilingualString

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	startOfPeriod	Start of period	Start of period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
Validity	validityStatus	Validity status	Specification of validity, either explicitly overriding the validity time specification or confirming it. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	1..1	ValidityStatusEnum

Table 32— Attributes of the "Validity" package

A.2.15 "VehicleCharacteristics" package

A.2.15.1 "VehicleCharacteristics" package classes

Class name	Designation	Definition	Stereotype	Abstract
VehicleCharacteristics	Vehicle characteristics	The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.		No

Table 33— Classes of the "VehicleCharacteristics" package

A.2.15.2 "VehicleCharacteristics" package association roles

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

A.2.15.3 "VehicleCharacteristics" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
VehicleCharacteristics	vehicleType	Vehicle type	Vehicle type.	0..*	VehicleTypeEnum

Table 34— Attributes of the "VehicleCharacteristics" package

A.2.16 "VehicleCharacteristicsExtension" package

A.2.16.1 "VehicleCharacteristicsExtension" package classes

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

Table 35— Classes of the "VehicleCharacteristicsExtension" package

A.2.16.2 "VehicleCharacteristicsExtension" package association roles

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

A.2.16.3 "VehicleCharacteristicsExtension" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
VehicleCharacteristics Extended	loadType2	Load type2	Loads currently not supported in 'LoadTypeEnum'.	0..1	LoadType2Enu m

Table 36— Attributes of the "VehicleCharacteristicsExtension" package

A.3 Data Dictionary of <<datatypes>> for "ASFINAG Intelligent Truck Parking EU compliant – Static Part"

This clause contains the definitions of all data types which are used in the "ASFINAG Intelligent Truck Parking EU compliant – Static Part".

A.3.1 The <<datatype>> "AmountOfMoney"

A monetary value expressed to two decimal places.

A.3.2 The <<datatype>> "MetresAsNonNegativeInteger"

A measure of distance defined in metres in a non negative integer format.

A.3.3 The <<datatype>> "Seconds"

Seconds.

A.4 Data Dictionary of <<enumerations>> for "ASFINAG Intelligent Truck Parking EU compliant – Static Part"

This clause contains the definitions of all enumerations which are used in the "ASFINAG Intelligent Truck Parking EU compliant – Static Part".

A.4.1 The <<enumeration>> "AccessCategoryEnum"

Specifies the category of the access.

Enumerated value name	Designation	Definition
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.
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 37— Values contained in the enumeration "AccessCategoryEnum"

A.4.2 The <<enumeration>> "AccessibilityEnum"

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

ASFINAG provides this information in excess of the information enforced by the EU Regulation.

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.

Enumerated value name	Designation	Definition
handicappedMarked	Handicapped marked	There is a visible mark for the privilege of handicapped or disabled people (e.g. a wheelchair symbol).
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 38— Values contained in the enumeration "AccessibilityEnum"

A.4.3 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 39— Values contained in the enumeration "AvailabilityEnum"

A.4.4 The <<enumeration>> "ChargingStationUsageTypeEnum"

Type of usage for electric charging station(s).

Enumerated value name	Designation	Definition
lorryPowerConsumption	Lorry power consumption	Supply for lorries with power consumption, e.g. for refrigerated goods transports.

Table 40— Values contained in the enumeration "ChargingStationUsageTypeEnum"

A.4.5 The <<enumeration>> "CountryEnum"

List of countries.

Enumerated value name	Designation	Definition
at	at	Austria
be	be	Belgium
bg	bg	Bulgaria
ch	ch	Switzerland
cs	cs	Serbia and Montenegro
cy	cy	Cyprus
cz	cz	Czech Republic
de	de	Germany
dk	dk	Denmark
ee	ee	Estonia
es	es	Spain
fi	fi	Finland
fo	fo	Faroe Islands
fr	fr	France
gb	gb	Great Britain
gg	gg	Guernsey
gi	gi	Gibraltar
gr	gr	Greece
hr	hr	Croatia
hu	hu	Hungary
ie	ie	Ireland
im	im	Isle Of Man
is	is	Iceland
it	it	Italy
je	je	Jersey
li	li	Lichtenstein
lt	lt	Lithuania

Enumerated value name	Designation	Definition
lu	lu	Luxembourg
lv	lv	Latvia
ma	ma	Morocco
mc	mc	Monaco
mk	mk	Macedonia
mt	mt	Malta
nl	nl	Netherlands
no	no	Norway
other	other	Other than as defined in this enumeration.
Pl	pl	Poland
pt	pt	Portugal
ro	ro	Romania
se	se	Sweden
si	si	Slovenia
sk	sk	Slovakia
sm	sm	San Marino
tr	tr	Turkey
va	va	Vatican City State

Table 41— Values contained in the enumeration "CountryEnum"

A.4.6 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	Azerbaijanian 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
rsd	Rsd	Serbian Dinar
rub	Rub	Russian Ruble
sek	Sek	Swedish Krona
try	Try	Turkish Lira
uah	Uah	Hryvnia (Ukraine)

Enumerated value name	Designation	Definition
usd	Usd	US Dollar

Table 42— Values contained in the enumeration "CurrencyEnum"

A.4.7 The <<enumeration>> "DayEnum"

Days of the week.

Enumerated value name	Designation	Definition
friday	Friday	Friday.
monday	Monday	Monday.
saturday	Saturday	Saturday.
sunday	Sunday	Sunday.
thursday	Thursday	Thursday.
tuesday	Tuesday	Tuesday.
wednesday	Wednesday	Wednesday.

Table 43— Values contained in the enumeration "DayEnum"

A.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.
fireExtingiusher	Fire extingiusher	Fire extinguisher
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.

Enumerated value name	Designation	Definition
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.
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.

A.4.9 The <<enumeration>> "GroupOfParkingSitesTypeEnum"

The type of this group of parking sites.

Enumerated value name	Designation	Definition
truckParkingPriorityZone	Truck parking priority zone	This group is describing a truck parking priority zone according to the EU regulation.

Table 45— Values contained in the enumeration "GroupOfParkingSitesTypeEnum"

A.4.10 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 46— Values contained in the enumeration "InterUrbanParkingSiteLocationEnum"

A.4.11 The <<enumeration>> "LoadType2Enum"

Loads that are currently not supported in loadType.

Enumerated value name	Designation	Definition
refrigeratedGoods	Refrigerated goods	Refrigerated goods.

Table 47— Values contained in the enumeration "LoadType2Enum"

A.4.12 The <<enumeration>> "MonthOfYearEnum"

A list of the months of the year.

Enumerated value name	Designation	Definition
april	April	The month of April.
august	August	The month of August.
december	December	The month of December.
february	February	The month of February.
january	January	The month of January.
july	July	The month of July.
june	June	The month of June.
march	March	The month of March.
may	May	The month of May.
november	November	The month of November.
october	October	The month of October.
september	September	The month of September.

Table 48— Values contained in the enumeration "MonthOfYearEnum"

A.4.13 The <<enumeration>> "ParkingSecurityEnum"

Specifies security measures related to the parking site or particular spaces.

Enumerated value name	Designation	Definition
areaSeperatedFromSurroundings	Area 39hemselve 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 49— Values contained in the enumeration "ParkingSecurityEnum"

A.4.14 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 50— Values contained in the enumeration "ParkingSupervisionEnum"

A.4.15 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.
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 51— Values contained in the enumeration "ParkingTypeOfGroup"

A.4.16 The <<enumeration>> "ParkingUsageScenarioEnum"

Types of parking usage (park & ride, kiss & ride, ...)

Enumerated value name	Designation	Definition
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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.
serviceArea	Service area	The parking site is associated with a service area. ASFINAG provides this information in excess of the information enforced by the EU Regulation.
truckParking	Truck parking	The parking site is designed for lorries (other vehicles are allowed as well).

Table 52— Values contained in the enumeration "ParkingUsageScenarioEnum"

A.4.17 The <<enumeration>> "RoadTypeEnum"

Categorisation of the road type (motorway, main road, ...).

ASFINAG provides this information in excess of the information enforced by the EU Regulation.

Enumerated value name	Designation	Definition
mainRoad	Main road	Main road.
motorway	Motorway	Motorway.
other	Other	Other.
trunkRoad	Trunk road	Trunk road.

Table 53— Values contained in the enumeration "RoadTypeEnum"

A.4.18 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.
Café	Café	Café.
carWash	Car wash	Car wash.
Docstop	Docstop	The site is part of the Docstop project, http://www.docstoponline.eu, 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.
Other	Other	Some other service facility. Use 'otherEquipmentOrServiceFacility' to specify it.
overnightAccommodation	Overnight accommodation	OvernightAccomodation.
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 44hemsel and fetch their meal 44hemselves, this might enclose a buffet.

Enumerated value name	Designation	Definition
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 54— Values contained in the enumeration "ServiceFacilityTypeEnum"

A.4.19 The <<enumeration>> "ValidityStatusEnum"

Values of validity status that can be assigned to a described event, action or item.

ASFINAG provides this information in excess of the information enforced by the EU Regulation.

Enumerated value name	Designation	Definition
active	Active	The described event, action or item is currently active regardless of the definition of the validity time specification.
definedByValidityTimeSpec	Defined by validity time spec	The validity status of the described event, action or item is in accordance with the definition of the validity time specification.
suspended	Suspended	The described event, action or item is currently suspended, that is inactive, regardless of the definition of the validity time specification.

Table 55— Values contained in the enumeration "ValidityStatusEnum"

A.4.20 The <<enumeration>> "VehicleTypeEnum"

Types of vehicle.

Enumerated value name	Designation	Definition
agriculturalVehicle	Agricultural vehicle	Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.
anyVehicle	Any vehicle	Vehicle of any type.
articulatedVehicle	Articulated vehicle	Articulated vehicle.
Bicycle	Bicycle	Bicycle.
Bus	Bus	Bus.
Car	Car	Car.
Caravan	Caravan	Caravan.
carOrLightVehicle	Car or light vehicle	Car or light vehicle.
carWithCaravan	Car with caravan	Car towing a caravan.
carWithTrailer	Car with trailer	Car towing a trailer.
constructionOrMaintenanceVehicle	Construction or maintenance vehicle	Vehicle normally used for construction or maintenance purposes, e.g. digger, excavator, bulldozer, lorry mounted crane etc.
fourWheelDrive	Four wheel drive	Four wheel drive vehicle.
highSidedVehicle	High sided vehicle	High sided vehicle.
Lorry	Lorry	Lorry of any type.
Moped	Moped	Moped (a two wheeled motor vehicle characterized by a small engine typically less than 50cc and by normally having pedals).
Motorcycle	Motorcycle	Motorcycle.
motorcycleWithSideCar	Motorcycle with side car	Three wheeled vehicle comprising a motorcycle with an attached side car.
Motorscooter	Motorscooter	Motorscooter (a two wheeled motor vehicle characterized by a step-through frame and small diameter wheels).
Other	Other	Other than as defined in this enumeration.
Tanker	Tanker	Vehicle with large tank for carrying bulk liquids.
threeWheeledVehicle	Three wheeled vehicle	Three wheeled vehicle of unspecified type.
Trailer	Trailer	Trailer.

Enumerated value name	Designation	Definition
Tram	Tram	Tram.
twoWheeledVehicle	Two wheeled vehicle	Two wheeled vehicle of unspecified type.
Van	Van	Van.
vehicleWithCaravan	Vehicle with caravan	Vehicle (of unspecified type) towing a caravan.
vehicleWithCatalyticConverter	Vehicle with catalytic converter	Vehicle with catalytic converter.
vehicleWithoutCatalyticConverter	Vehicle without catalytic converter	Vehicle without catalytic converter.
vehicleWithTrailer	Vehicle with trailer	Vehicle (of unspecified type) towing a trailer.
withEvenNumberedRegistrationPlates	With even numbered registration plates	Vehicle with even numbered registration plate.
withOddNumberedRegistrationPlates	With odd numbered registration plates	Vehicle with odd numbered registration plate.

Table 56— Values contained in the enumeration "VehicleTypeEnum"

A.4.21 The <<enumeration>> "WeekOfMonthEnum"

Weeks of the month.

Enumerated value name	Designation	Definition
fifthWeekOfMonth	Fifth week of month	Fifth week of the month (at most only 3 days and non in February when not a leap year).
firstWeekOfMonth	First week of month	First week of the month.
fourthWeekOfMonth	Fourth week of month	Fourth week of the month.
secondWeekOfMonth	Second week of month	Second week of the month.
thirdWeekOfMonth	Third week of month	Third week of the month.

Table 57— Values contained in the enumeration "WeekOfMonthEnum"

A.5 Alphabetical list of attributes

Attribute name	Class name	Designation	Definition	Multiplicity	Type

accessCategory	ParkingAccess	Access category	Specifies the category(s) of this access.	1..*	AccessCategoryEnum
accessibility	ParkingEquipmentOrServiceFacility	Accessibility	Information on accessibility, easements and marking for handicapped people. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..*	AccessibilityEnum
additionalDescription	ParkingEquipmentOrServiceFacility	Additional description	Provides an additional description.	0..1	MultilingualString
applicableDay	DayWeekMonth	Applicable day	Applicable day of the week. "All days of the week" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..7	DayEnum
applicableMonth	DayWeekMonth	Applicable month	Applicable month of the year. "All months of the year" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..12	MonthOfYearEnum
applicableWeek	DayWeekMonth	Applicable week	Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this attribute. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..5	WeekOfMonthEnum
availability	ParkingEquipmentOrServiceFacility	Availability	Specifies, if the element in question is available or not. Note that this is no dynamic information!	0..1	AvailabilityEnum
certifiedSecureParking	ParkingStandardsAndSecurity	Certified secure parking	Presence of a certification for secure parking.	0..1	Boolean
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
chargeBandName	ChargeBand	Charge band name	Name for this charge band.	0..1	MultilingualString

chargeBandReference	ChargeBandByReference	Charge band reference	A reference to a charge band.	1..1	VersionedReference
chargeCurrency	ChargeBand	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
chargeInterval	Charge	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
chargeTypeDescription	Charge	Charge type description	Additional description for this kind of charge type, especially if the enumeration does not fit.	0..1	MultilingualString
chargingStationUsageType	ElectricCharging	Charging station usage type	Usage type of the electric charging station(s).	1..*	ChargingStationUsageTypeEnum
contactDetailsAddress	ContactDetails	Contact details address	Complete address of the contact. Alternatively use the separate fields to describe the address.	0..1	MultilingualString
contactDetailsCity	ContactDetails	Contact details city	City of the contact.	0..1	MultilingualString
contactDetailsEMail	ContactDetails	Contact details e mail	E-Mail address of the contact.	0..1	String
contactDetailsHouseNumber	ContactDetails	Contact details house number	House number of the contact. Supports a multiplicity up to two, to specify lower and upper numbers.	0..2	String
contactDetailsPostcode	ContactDetails	Contact details postcode	Postcode of the contact.	0..1	String
contactDetailsStreet	ContactDetails	Contact details street	Street of the contact.	0..1	String
contactDetailsTelephoneNumber	ContactDetails	Contact details telephone number	Telephone Number of contact.	0..1	String
contactNotDefined	Contact	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

contactOrganisationName	ContactDetails	Contact organisation name	Name of the organisation or service. Do not use this attribute in combination with role "parkingSiteAddress".	0..1	MultilingualString
contactPersonFirstName	ContactDetails	Contact person first name	First name of the contact person.	0..1	String
contactPersonName	ContactDetails	Contact person name	Name of the contact person.	0..1	String
contactReference	ContactByReference	Contact reference	Contact information provided by a reference.	1..1	VersionedReference
contactUnknown	Contact	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
country	ContactDetails	Country	ISO 3166-1 two character country code.	0..1	CountryEnum
dateOfCertification	ParkingStandardsAndSecurity	Date of certification	Date of certification.	0..1	Date
distanceFromParkingSite	ServiceFacility	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
distanceToThisRoad	Road	Distance to this road	Distance to the road in metres (from the calling component/object).	0..1	MetresAsNonNegativeInteger
endOfPeriod	Period	End of period	End of a period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
endTimeOfPeriod	TimePeriodByHour	End time of period	End of time period.	1..1	Time
equipmentType	Equipment	Equipment type	One type of equipment, that is available on the parking site.	1..1	EquipmentTypeEnum
freeOfCharge	TariffsAndPayment	Free of charge	No fee at all. In this case, no further elements of the tariffs structure are needed.	0..1	Boolean
genericPublicationName	GenericPublication	Generic publication name	The name of the generic publication.	1..1	String
groupOfParkingSitesType	GroupOfParkingSites	Group of parking sites type	The type of this group of parking sites.	0..1	GroupOfParkingSitesTypeEnum

interUrbanParkingSite Location	InterUrbanParkingSite	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
junctionName	RoadNode	Junction name	Name of the junction.	1..1	MultilingualString
lastUpdated	TariffsAndPayment	Last updated	The date/time at which this information was last updated.	0..1	DateTime
loadType2	VehicleCharacteristics Extended	Load type2	Loads currently not supported in 'LoadTypeEnum'.	0..1	LoadType2Enum
nameOrBrand	ParkingEquipmentOrServiceFacility	Name or brand	Name or brand of the equipment or service facility, e.g. brand of petrol station, name of the WC-Service etc. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	MultilingualString
numberOfSubitems	ServiceFacility	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
otherEquipmentOrServiceFacility	ParkingEquipmentOrServiceFacility	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
overallEndTime	OverallPeriod	Overall end time	End of bounding period of validity defined by date and time. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
overallStartTime	OverallPeriod	Overall start time	Start of bounding period of validity defined by date and time. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	1..1	DateTime
parkingAdditionalSecurity	ParkingStandardsAndSecurity	Parking additional security	Security equipment of the parking site that is not covered by the enumeration 'ParkingSecurityEnum'.	0..*	MultilingualString
parkingAlias	ParkingRecord	Parking alias	Alternative name for the parking site or the group of parking sites.	0..*	MultilingualString

parkingName	ParkingRecord	Parking name	Name of the parking, i.e. name of the parking site or the group of parking sites.	1..1	MultilingualString
parkingNumberOfSpaces	ParkingRecord	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
parkingNumberOfSpaces	GroupOfParkingSpaces	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
parkingRecordVersionTime	ParkingRecord	Parking record version time	Date/time that this version of the parking record was defined.	1..1	DateTime
parkingSecurity	ParkingStandardsAndSecurity	Parking security	Specifies security measures related to the parking site or particular spaces.	0..*	ParkingSecurityEnum
parkingSecurityNationalClassification	ParkingStandardsAndSecurity	Parking security national classification	A national classification of the parking security.	0..1	MultilingualString
parkingSiteByReference	GroupOfParkingSites	Parking site by reference	Parking sites of this collection defined by reference.	0..*	VersionedReference
parkingSupervision	ParkingStandardsAndSecurity	Parking supervision	Defines the kind of supervision of the parking site.	0..*	ParkingSupervisionEnum
parkingTableName	ParkingTable	Parking table name	The name of the parking table.	0..1	MultilingualString
parkingTableVersionTime	ParkingTable	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
parkingTypeOfGroup	GroupOfParkingSpaces	Parking type of group	Defines the type of this group specification.	1..1	ParkingTypeOfGroup
parkingUsageScenario	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
periodName	Period	Period name	The name of the period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	MultilingualString

photoUrl	ParkingEquipmentOrServiceFacility	Photo url	Specifies a URL at which a photo of the object in concern can be found. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	Url
publishingAgreement	ContactDetails	Publishing agreement	Indication, whether the contact accepted publishing its contact information.	0..1	Boolean
roadDestination	Road	Road destination	Name of some city, area, compass direction or other identification the road is leading to (to determine the direction in question).	1..*	MultilingualString
roadIdentifier	Road	Road identifier	Identifier/number of the road.	1..1	MultilingualString
serviceFacilityType	ServiceFacility	Service facility type	One type of service, that is available on the parking site.	1..1	ServiceFacilityTypeEnum
startOfPeriod	Period	Start of period	Start of period. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	DateTime
startTimeOfPeriod	TimePeriodByHour	Start time of period	Start of time period.	1..1	Time
typeOfRoad	Road	Type of road	Type of the road. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	RoadTypeEnum
validityStatus	Validity	Validity status	Specification of validity, either explicitly overriding the validity time specification or confirming it. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	1..1	ValidityStatusEnum
vehicleType	VehicleCharacteristics	Vehicle type	Vehicle type.	0..*	VehicleTypeEnum

Table 58- Alphabetical list of attributes

A.6 Alphabetical list of roles

Role name	Class name	Designation	Definition	Multiplicity	Target
applicableForVehicles	ParkingEquipmentOrServiceFacility	Applicable for vehicles		0..*	VehicleCharacteristics
assignedParkingAmongOthers	ParkingRecord	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
assignedParkingAmongOthers	ParkingSpaceBasics	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
availabilityAndOpeningTimes	ParkingEquipmentOrServiceFacility	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. ASFINAG provides this information in excess of the information enforced by the EU Regulation.	0..1	OpeningTimes
entireArea	ParkingRecord	Entire area	An underlaying 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	ParkingRecord	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
onlyAssignedParking	ParkingRecord	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
onlyAssignedParking	ParkingSpaceBasics	Only assigned parking	Parking is only allowed for the assignment given in this class, i.e. other assignments	0..1	ParkingAssignment

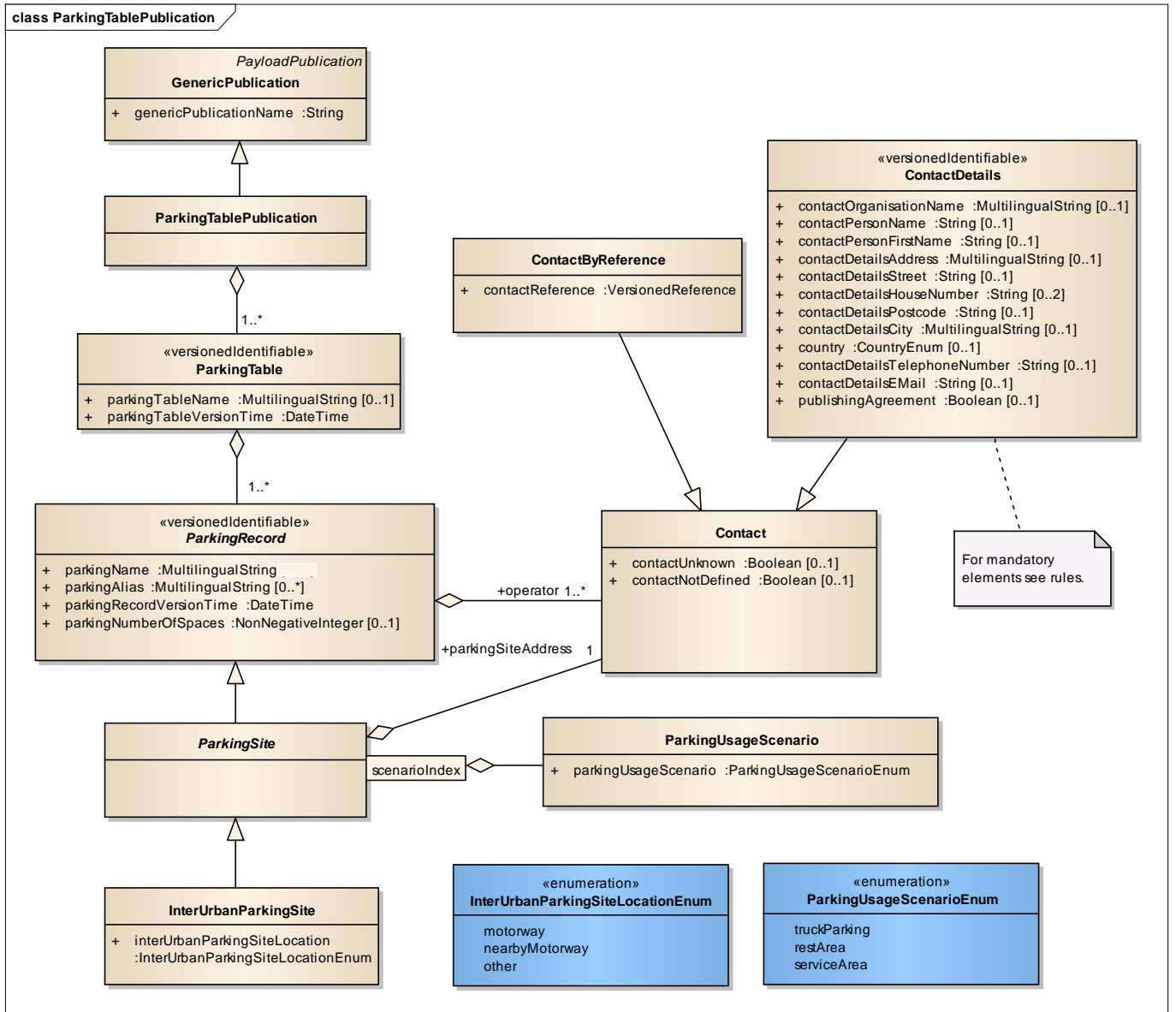|			are not allowed. By using this role, it is not allowed to use 'assignedParkingAmongOthers' and 'prohibitedParking' for the same type of attributes.		
operator	ParkingRecord	Operator	Contact details of the operator of the parking facility.	1..*	Contact
parkingLocation	ParkingRecord	Parking location	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	GroupOfLocations
parkingSiteAddress	ParkingSite	Parking site address	Information about the parking site itself (address etc.). The 'GroupOfLocations' association must not be used for this role.	1..*	Contact
primaryRoad	ParkingAccess	Primary road	Identification for up to two primary roads located nearby the access or which make the parking accessible.	1..*	Road
prohibitedParking	ParkingSpaceBasics	Prohibited parking	Parking is not allowed for the given assignment.	0..1	ParkingAssignment
prohibitedParking	ParkingRecord	Prohibited parking	Parking is not allowed for the given assignment.	0..1	ParkingAssignment
recurringDayWeekMonthPeriod	Period	Recurring day week month period	A recurring period defined in terms of days of the week, weeks of the month and months of the year.	0..*	DayWeekMonth
recurringTimePeriodOfDay	Period	Recurring time period of day	A recurring period of a day.	0..*	TimePeriodOfDay
validityTimeSpecification	Validity	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).	1..1	OverallPeriod
validPeriod	OverallPeriod	Valid period	A single time period, a recurring time period or a set of different recurring time periods during which validity is true.	0..*	Period

Table 59- Alphabetical list of roles
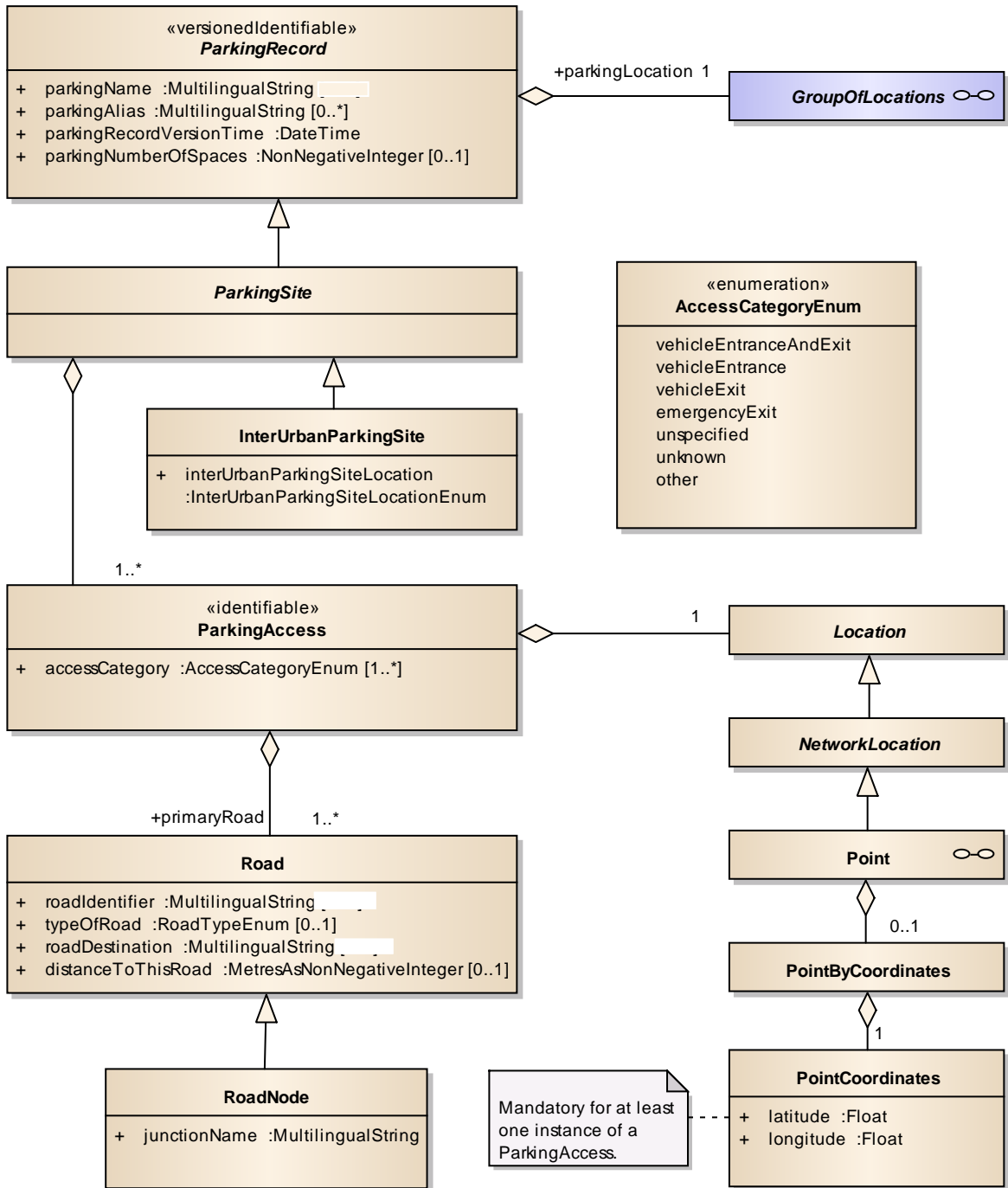
A.7 Figures

Figure 1 – ParkingTablePublication
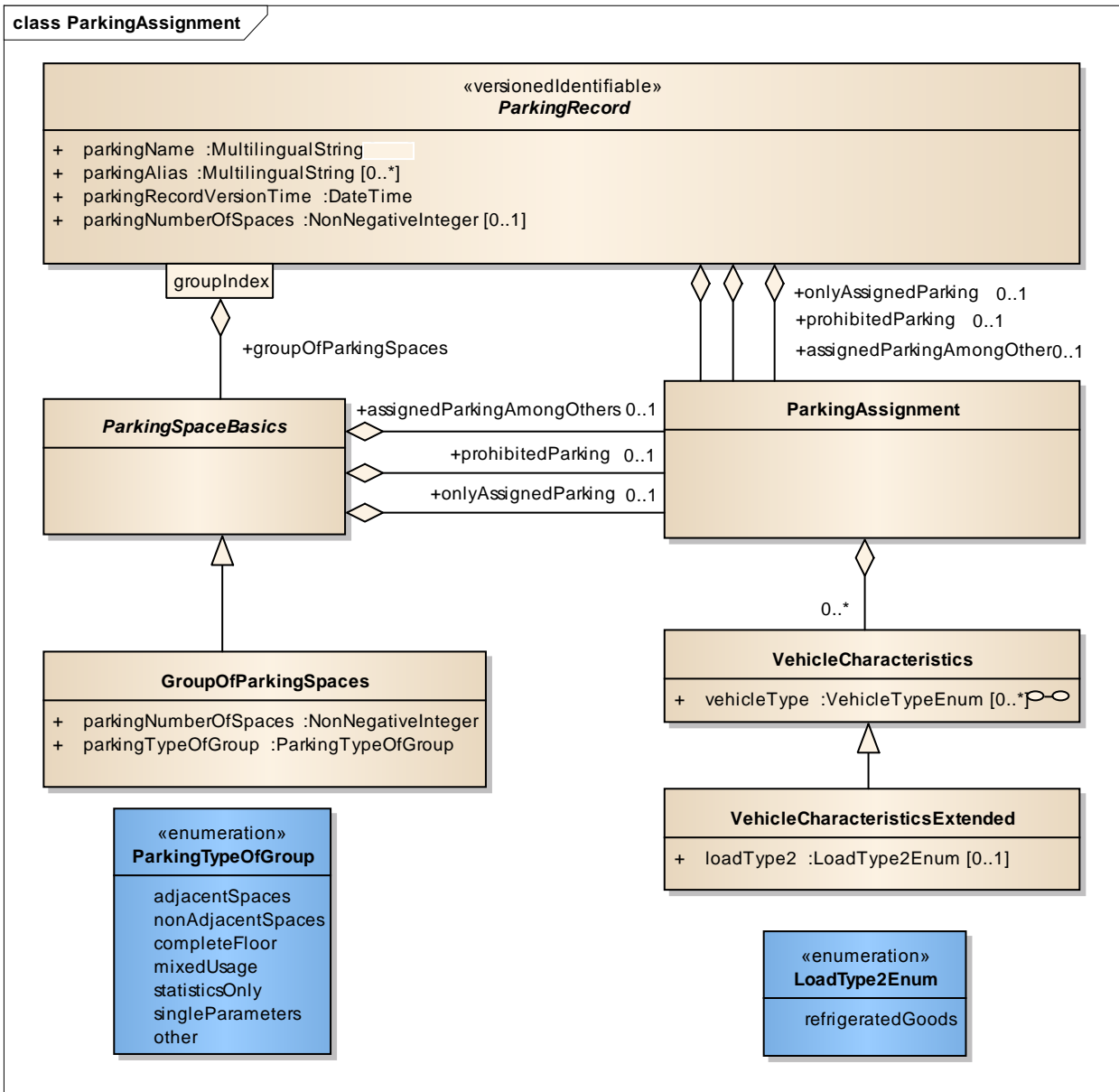
Figure 2 – ParkingSite

Figure 3 – ParkingAssignment

«versionedIdentifiable»
ParkingRecord

equipmentOrServiceFacilityIndex

ParkingEquipmentOrServiceFacility

+ availability :AvailabilityEnum [0..1]
+ additionalDescription :MultilingualString [0..1]
+ otherEquipmentOrServiceFacility :MultilingualString [0..1]
+ accessibility :AccessibilityEnum [0..*]
+ nameOrBrand :MultilingualString [0..1]
+ photoUrl :Url [0..1]

VehicleCharacteristics

+ vehicleType :VehicleTypeEnum [0..]

+applicableForVehicles

0..*

+availabilityAndOpeningTimes

OpeningTimes

1   0..1

ServiceFacility

+ serviceFacilityType :ServiceFacilityTypeEnum
+ numberOfSubitems :NonNegativeInteger [0..1]
+ distanceFromParkingSite :MetresAsNonNegativeInteger [0..1]

Equipment

+ equipmentType :EquipmentTypeEnum

0..1

ElectricCharging

+ chargingStationUsageType :ChargingStationUsageTypeEnum [1..*]

«enumeration»
ChargingStationUsageTypeEnum

lorryPowerConsumption

«enumeration»
AccessibilityEnum

barrierFreeAccessible
handicappedAccessible
wheelChairAccessible
handicappedEasements
orientationSystemForBlindPeople
handicappedMarked
none
unknown
other

«enumeration»
EquipmentTypeEnum

toilet
shower
informationPoint
informatonStele
internetTerminal
internetWireless
payDesk
paymentMachine
cashMachine
vendingMachine
faxMachineOrService
copyMachineOrService
safeDeposit
luggageLocker
publicPhone
publicCoinPhone
publicCardPhone
elevator
picnicFacilities
dumpingStation
freshWater
wasteDisposal
refuseBin
iceFreeScaffold
playground
electricChargingStation
bikeParking
tollTerminal
defibrillator
firstAidEquipment
fireHose
fireExtingiusher
fireHydrant
none
unknown
other

«enumeration»
ServiceFacilityTypeEnum

hotel
motel
overnightAccommodation
shop
kiosk
foodShopping
cafe
restaurant
restaurantSelfService
motorwayRestaurant
motorwayRestaurantSmall
sparePartsShopping
petrolStation
vehicleMaintenance
tyreRepair
truckRepair
truckWash
carWash
pharmacy
medicalFacility
police
touristInformation
bikeSharing
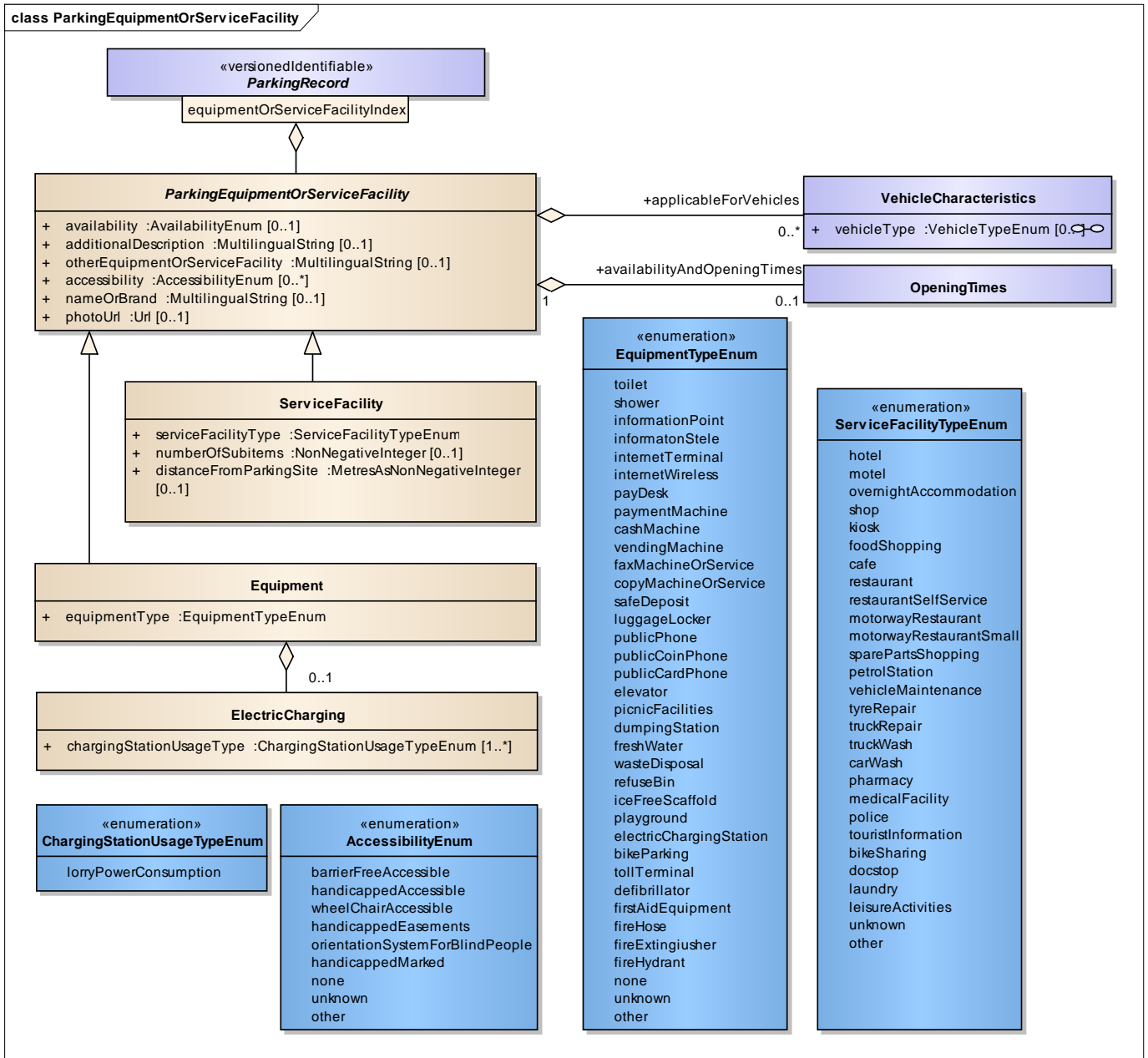docstop
laundry
leisureActivities
unknown
other

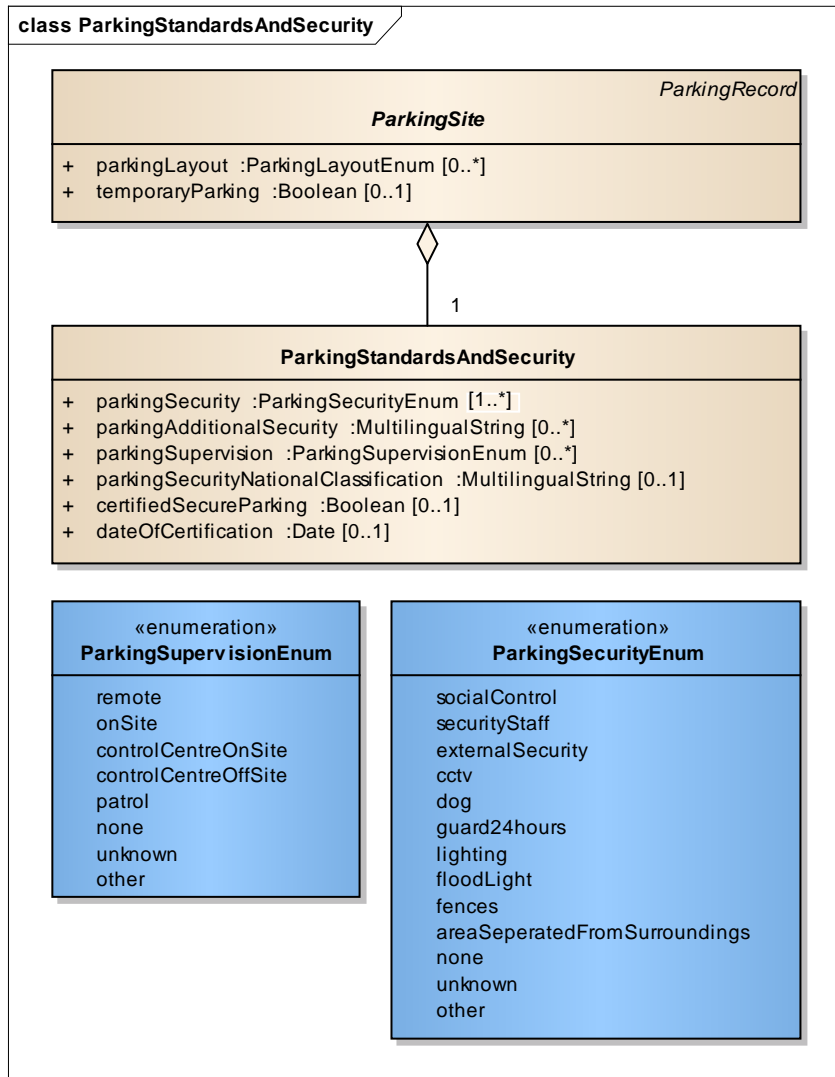**Figure 4 – ParkingEquipmentOrServiceFacility**
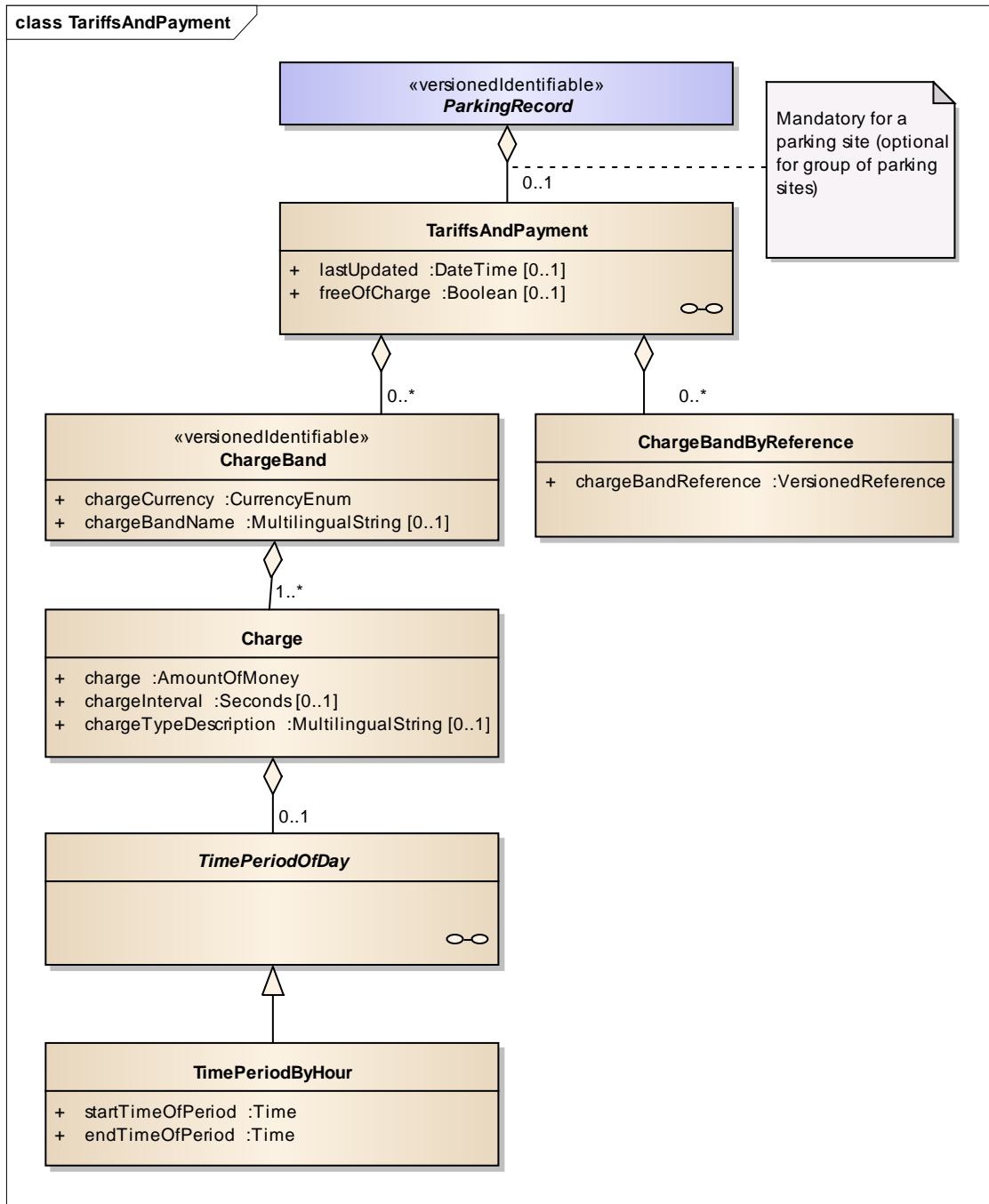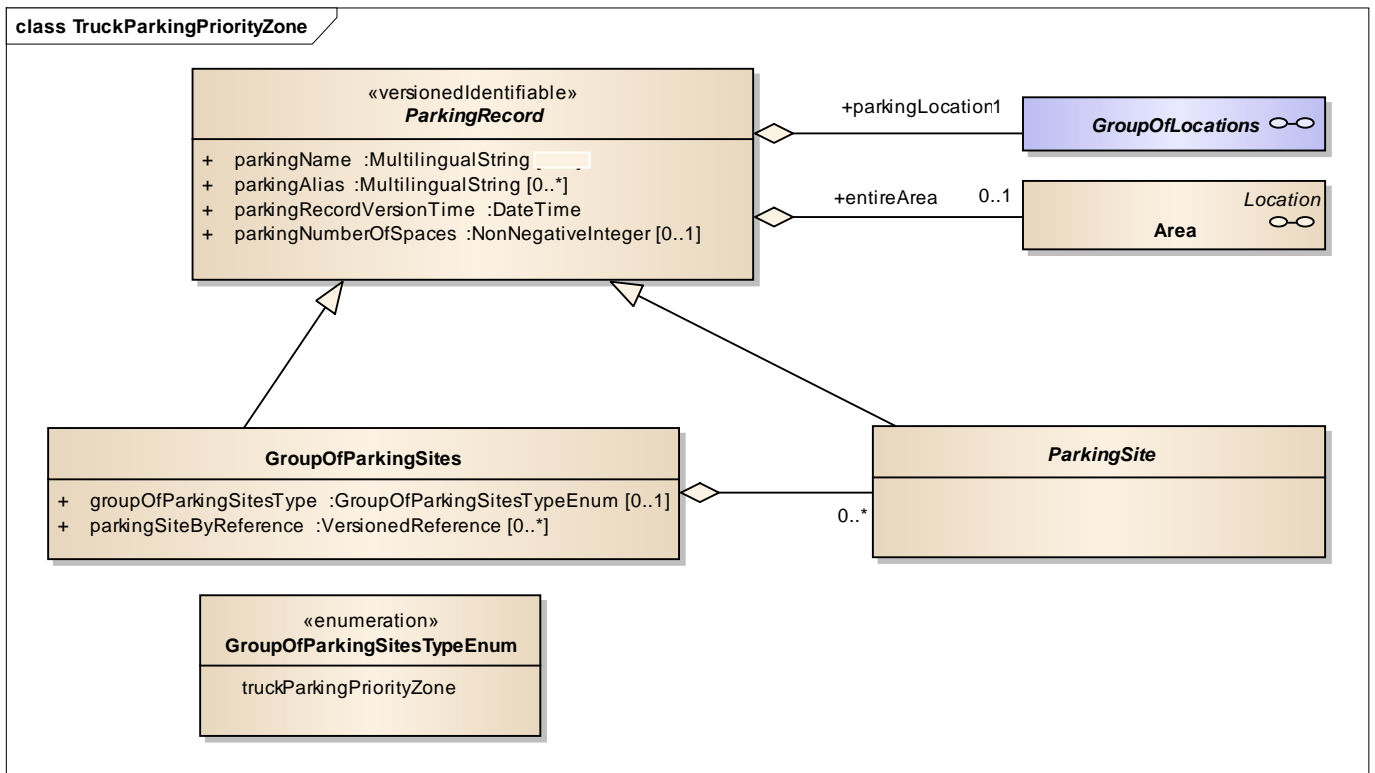
Figure 5 – ParkingStandardsAndSecurity

Figure 6 – TariffsAndPayment

Figure 7 – TruckParkingPriorityZone