

Parking Publication light

Data Dictionary

Annex A

A.1 Data Dictionary for "ParkingLight"

A.1.1 "ParkingPublicationLight" package

A.1.1.1 Location of "ParkingPublicationLight" package

The location of "ParkingPublicationLight" package is:

— D2Payload/PayloadPublication/ParkingPublicationLight

A.1.1.2 Classes of the "ParkingPublicationLight" package

Table A.1— Classes of the "ParkingPublicationLight" package

Class name	Designation	Definition	Stereotype	Abstract
Assignment	Assignment	An assignment for a parking site or a parking space. Might be including or excluding, depending on typeOfAssignment.	D2Class	no
Coordinate	Coordinate	A pair of planar coordinates defining the geodetic position of a single point using the European Terrestrial Reference System 1989 (ETRS89).	D2Class	no
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).	D2Class	no
LocationAndDimension	Location and dimension	Location	D2Class	no
ParkingPublicationLight	Parking publication light	A simplified publication to transfer parking information.	D2Class	no

Class name	Designation	Definition	Stereotype	Abstract
ParkingSite	Parking site	A collection of parking spaces within a building, an open ground or some on street area. Usually seen as one entity and manged as such.	D2Class	no
ParkingSpace	Parking space	A parking space, i.e. a single slot for one vehicle. Includes dynamic information if it is available or not.	D2Class	no

A.1.1.3 Associations of the "ParkingPublicationLight" package

Table A.2— Associations of the "ParkingPublicationLight" package

Class name	Association end	Designation	Definition	Multiplicity	Target
LocationAndDimension	gmlLinearRing	Gml linear ring		0..1	GmlLinearRing
	dimension	Dimension		0..1	Dimension
	coordinatesForDisplay	Coordinates for display	Coordinates that may be used by clients for visual display on user interfaces.	1..1	Coordinate
ParkingPublicationLight	parkingSite	Parking site		0..*	ParkingSite
	parkingSpace	Parking space		0..*	ParkingSpace
ParkingSite	assignedFor	Assigned for		0..*	Assignment
	locationAndDimension	Location and dimension		1..1	LocationAndDimension
ParkingSpace	assignedFor	Assigned for		0..*	Assignment
	locationAndDimension	Location and dimension		1..1	LocationAndDimension

A.1.1.4 Attributes of the "ParkingPublicationLight" package

Table A.3— Attributes of the "ParkingPublicationLight" package

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Assignment	additionalAssignment	Additional assignment	An additional assignment in natural language.	0..1	String

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	availableSpaces	Available spaces	The total number of currently vacant parking spaces within this site for the given assignment. (e.g. for lorries). Use only with type of assignment = 'optimised' or 'allowed'. Do not use when describing a single parking space.	0..1	NonNegativeInteger
	fuelType	Fuel type	The type of fuel this assignment refers to.	0..1	FuelTypeEnum
	typeOfAssignment	Type of assignment	Defines, if this assignment is of including or excluding nature.	1..1	AssignmentTypeEnum
	user	User	A user this assignment refers to.	0..1	UserTypeEnum
	vehicleType	Vehicle type	The vehicle type this assignment refers to.	0..1	VehicleTypeEnum
Coordinate	latitude	Latitude	Latitude in decimal degrees using the European Terrestrial Reference System 1989 (ETRS89).	1..1	Float
	longitude	Longitude	Longitude in decimal degrees using the European Terrestrial Reference System 1989 (ETRS89).	1..1	Float
Dimension	height	Height	Height.	0..1	MetresAsFloat
	length	Length	Length.	0..1	MetresAsFloat
	orientationOfLengthAxis	Orientation of length axis	The orientation of the length axis in degree. In the case of a parking space, this corresponds to the direction, in which a vehicle is parked.	0..1	AngleInDegrees
	usableArea	Usable area	The area measured in square metres, that is available for some specific purpose.	0..1	SquareMetres
	width	Width	Width.	0..1	MetresAsFloat
LocationAndDimension	level	Level	The level of the parking space (0 = ground etc.), or the first level of the entire parking site (for example, if a parking site is located on the roof of a building).	0..1	Integer
	locationDescriptor	Location descriptor	Supplementary human-readable description of the location	0..1	String

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	roadName	Road name	Information on a road	0..1	String
	roadNumber	Road number	The road number designated by the road authority	0..1	String
	specificAccessInformation	Specific access information	Information on one specific access (entrance or exit) in human readable text, for example the corresponding road where it is located.	0..*	String
ParkingPublicationLight	description	Description	A description for the parking light publication.	0..1	String
	name	Name	The name of the parking light publication.	0..1	String
ParkingSite	availableSpaces	Available spaces	The total number of currently vacant parking spaces available in the specified parking site.	0..1	NonNegativeInteger
	description	Description	A description for this parking site.	0..1	String
	equipmentAndServices	Equipment and services	Equipment and services available at this parking site, described in natural language.	0..*	String
	freeParking	Free parking	If true, parking is free at this site.	0..1	Boolean
	isOpenNow	Is open now	True, if the parking site is open right now.	0..1	Boolean
	lastUpdate	Last update	Last update time of this parking site information.	0..1	DateTime
	maximumParkingDuration	Maximum parking duration	The maximum parking duration for this parking site.	0..1	Seconds
	name	Name	Name for this parking site.	0..1	String
	numberOfSpaces	Number of spaces	The total number of parking spaces at this site, not including closed spaces (due to maintenance, for example).	0..1	NonNegativeInteger
	occupancyTrend	Occupancy trend	The trend of the occupancy of the parking spaces in the specified parking site.	0..1	ParkingOccupancyTrendEnum
	openingTimesDescription	Opening times description	Opening times of this parking site, described in natural language.	0..*	String

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	operatorInformation	Operator information	Information about the operator of this parking site.	0..*	String
	security	Security	Security aspects at this parking site, described in natural language.	0..*	String
	tariffDescription	Tariff description	Information about the parking-tariffs in natural language.	0..*	String
	temporaryClosed	Temporary closed	True, if the parking site is closed ignoring its regular opening times, for example due to maintenance or constructions.	0..1	Boolean
	type	Type	Type of this parking site.	1..1	ParkingSiteTypeEnum
	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
	zoneDescription	Zone description	A description of some specific zone this parking site might belong to,	0..*	String
ParkingSpace	accessibility	Accessibility	Information on accessibility, easements and marking for handicapped people.	0..*	AccessibilityEnum
	availability	Availability	Information if this space is closed, available or occupied.	1..1	AvailabilityEnum
	externalIdentifier	External identifier	An external identifier for this parking space, e.g. "R145"	0..1	String
	lastUpdate	Last update	Point of time of the latest update of this information.	0..1	DateTime
	maximumParkingDuration	Maximum parking duration	The maximum parking duration for this parking space.	0..1	Seconds
	nextAvailableTimeSlot	Next available time slot	In case there is a reservation or time management: Point of time this space will be available for usage.	0..*	DateTime
	parkingSiteReference	Parking site reference	A reference to a parking site this parking space belongs to.	0..1	Reference

A.2 Data Dictionary of <<D2Datatype>> for "ParkingLight"

A.2.1 Introduction

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

A.2.2 The <<D2Datatype>> "SquareMetres"

Square metres.

A.3 Data Dictionary of <<D2Enumeration>> for "ParkingLight"

A.3.1 Introduction

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

A.3.2 The <<D2Enumeration>> "AccessibilityEnum"

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

Table A.4— Values contained in the enumeration "AccessibilityEnum"

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).
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.

Enumerated value name	Designation	Definition
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.

A.3.3 The <<D2Enumeration>> "AssignmentTypeEnum"

Including or excluding parameters for assignments.

Table A.5— Values contained in the enumeration "AssignmentTypeEnum"

Enumerated value name	Designation	Definition
allowedFor	Allowed for	Specified types of vehicles or users are allowed.
onlyFor	Only for	All assignments specified with 'onlyFor' are allowed, others are not. Note that this is group-specific! Specifying users for example does not restrict vehicles or vice versa!
optimisedFor	Optimised for	The space or site is optimised for this assignment. This does not automatically prohibit other assignments.
prohibitedFor	Prohibited for	This assignment is prohibited on the site or space.

A.3.4 The <<D2Enumeration>> "AvailabilityEnum"

Information if a parking space is closed, available or occupied.

Table A.6— Values contained in the enumeration "AvailabilityEnum"

Enumerated value name	Designation	Definition
available	Available	The parking space is available / free for use.

Enumerated value name	Designation	Definition
closed	Closed	The parking space is closed / not usable.
occupied	Occupied	The parking space is occupied / not free for use.
unknown	Unknown	There is no information about the status of this parking space.

A.3.5 The <<D2Enumeration>> "FuelTypeEnum"

Type of fuel used by a vehicle.

Table A.7— Values contained in the enumeration "FuelTypeEnum"

Enumerated value name	Designation	Definition
all	All	All sort of fuel is accepted.
battery	Battery	Battery.
biodiesel	Biodiesel	Biodiesel.
diesel	Diesel	Fuel used for compression-ignition (CI) engines.
dieselBatteryHybrid	Diesel battery hybrid	Diesel and battery hybrid.
ethanol	Ethanol	Ethanol.
hydrogen	Hydrogen	Hydrogen.
liquidGas	Liquid gas	Liquid gas of any type including LPG.
lpg	LPG	Liquid petroleum gas.
methane	Methane	Methane gas.
other	Other	Other.
petrol	Petrol	Fuel used for positive-ignition (PI) engines.

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

A.3.6 The <<D2Enumeration>> "ParkingOccupancyTrendEnum"

List of terms used to describe the trend in parking space occupancy.

Table A.8— Values contained in the enumeration "ParkingOccupancyTrendEnum"

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.

A.3.7 The <<D2Enumeration>> "ParkingSiteTypeEnum"

Type of the parking site.

Table A.9— Values contained in the enumeration "ParkingSiteTypeEnum"

Enumerated value name	Designation	Definition
carPark	Car park	A car park, usually in the form of a building.
motorwayParking	Motorway parking	A motorway parking area. Usually also including lorry parking and some facilities/services for drivers.
offStreetParkingGround	Off street parking ground	A parking ground, usually only one level.
onStreet	On street	Parking along the street.
other	Other	Other.
restArea	Rest area	A rest area. Lorry parking might be possible, but focus is on cars.
specialLocationParking	Special location parking	A parking site belonging to some specific facility, e.g. station, airport, shopping centre...
temporaryParking	Temporary parking	A parking site designed on a temporary basis. For example, some ground which is foreseen for construction works at a later point of time. Might be provisional in terms of quality and services.

A.3.8 The <<D2Enumeration>> "UserTypeEnum"

Types of users; used for parking but also for usage of equipment and services.

Table A.10— Values contained in the enumeration "UserTypeEnum"

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.

Enumerated value name	Designation	Definition
reservationHolders	Reservation holders	Those who have a valid reservation for the duration of parking.
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.

A.3.9 The <<D2Enumeration>> "VehicleTypeEnum"

Types of vehicle.

Table A.11— Values contained in the enumeration "VehicleTypeEnum"

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.

Enumerated value name	Designation	Definition
articulatedBus	Articulated bus	Articulated bus
articulatedTrolleyBus	Articulated trolley bus	Articulated trolley bus
articulatedVehicle	Articulated vehicle	Articulated vehicle.
bicycle	Bicycle	Bicycle.
bus	Bus	Bus.
car	Car	Vehicles designed and constructed for the carriage of passengers and comprising no more than eight seats in addition to the driver's seat, and having a maximum mass ("technically permissible maximum laden mass") not exceeding 3.5 tons (M1).
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.
heavyDutyTransporter	Heavy duty transporter	A transporter for heavy duty (usually with abnormal dimensions).
heavyGoodsVehicle	Heavy goods vehicle	Vehicles with a total weight above 3,500 kg (vehicle and load).
heavyGoodsVehicleWithTrailer	Heavy goods vehicle with trailer	Heavy goods vehicle with trailer
heavyVehicle	Heavy vehicle	Vehicle whose weight means it should be classed as a heavy vehicle
highSidedVehicle	High sided vehicle	High sided vehicle.
largeCar	Large car	Large car

Enumerated value name	Designation	Definition
largeGoodsVehicle	Large goods vehicle	Vehicles for the carriage of goods and having a maximum mass exceeding 3.5 tonnes (belonging to class N2 when not exceeding 12 tonnes, otherwise class N3).
lightCommercialVehicle	Light commercial vehicle	Vehicles for the carriage of goods and having a maximum mass not exceeding 3.5 tonnes (class N1).
lightCommercialVehicleWithTrailer	Light commercial vehicle with trailer	Light goods vehicle with trailer
lorry	Lorry	Lorry of any type.
metro	Metro	Metro
minibus	Minibus	Vehicles designed and constructed for the carriage of passengers, comprising more than eight seats in addition to the driver's seat, and having a maximum mass not exceeding 5 tonnes (class M2).
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.
motorhome	Motorhome	Motorhome
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.

Enumerated value name	Designation	Definition
passengerCar	Passenger car	Passenger car
smallCar	Small car	Small car
tanker	Tanker	Vehicle with large tank for carrying bulk liquids.
threeWheeledVehicle	Three wheeled vehicle	Three wheeled vehicle of unspecified type.
trailer	Trailer	Trailer.
tram	Tram	Tram.
trolleyBus	Trolley bus	Trolley bus
twoWheeledVehicle	Two wheeled vehicle	Two wheeled vehicle of unspecified type.
unknown	Unknown	Unknown.
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.