

# Parking Publication light

## Documentation

Parking light is a light DATEX II data model to publish parking information. The information is reduced to a minimum covering a typical use case for publishing basic information on free parking spaces via an app, for example.

Note that this model differs from the DATEX II Parking Publications, which offer a much broader variety of parking and parking related information. Thus, the models are not compatible, and also their structure differs a lot.

### Structure

Directly in the main publication class (**ParkingPublicationLight**) any number of parking sites, parking spaces (i.e. a single space usually used for one vehicle) or both can be defined. There is no group of parking sites, and there is no aggregation between a space and a site (but you can give a reference from a space to a site). Both objects are identifiable by an id (but not a version). There is an optional timestamp **lastUpdate** – if it is not used, the publication time is used as last update indication.

The Parking light model comprises ‘static’ as well as ‘dynamic’ features known from the Parking Publications model, i.e. there is no distinction between different update cycles of the information. **The main use-case of the model is to directly publish (only) available parking spaces.** However, with the mandatory attribute **availability**, it is also possible to specify if a space is occupied (or closed).

### Location

Location/georeferencing is done by coordinates (for display) and/or by a using GML Linear Ring. Thus, it is possible to define the area of a parking site or even the exact outline of a parking space, if necessary. A String may help to describe the location.

Further location-related elements are the road name and number, the level (if applicable) and the dimensions, each both for sites and spaces.

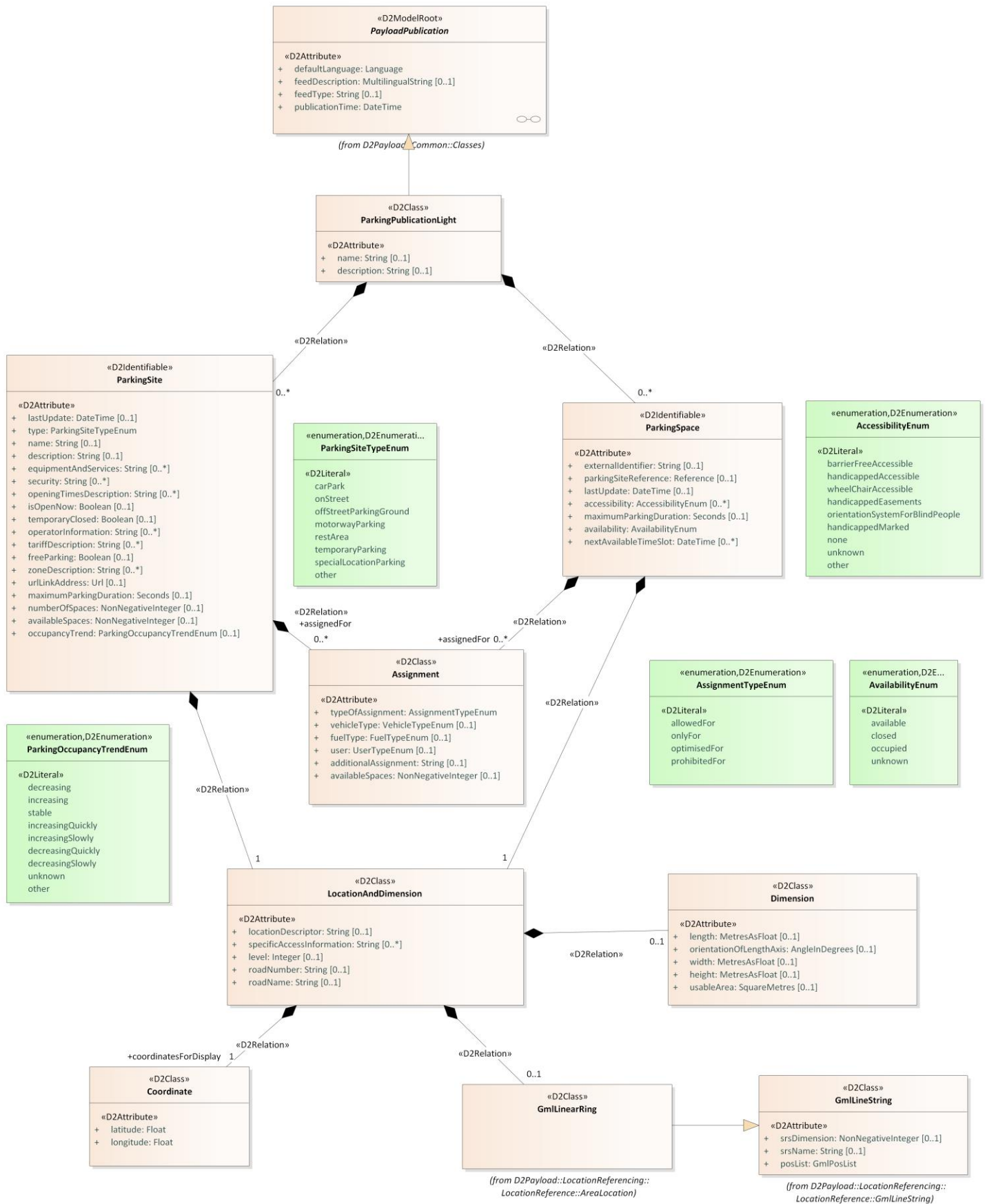
### Language

Multilingual strings known from other DATEX II models are not used, as light publications are used to cover only one language. Thus, free text elements use the datatype **String**.

## Main options

Option	Representation in the model
Assignments (who is allowed to park)	Can be given by vehicleType, fuelType and/or users and as String attribute
Tariff information	String attribute, additional attribute for 'free parking'
Equipment and services	String attribute
Security and standards	String attribute
Operator information	String attribute
Access	String attribute "specificAccessInformation" [0..*] in LocationAndDimension
Opening times	String; attributes isOpenNow, temporaryClosed
Location	Point Coordinates, GML Area, String (address description), roadName, roadNumber
Corresponding parking zone	String attribute
Group of parking spaces	Indirect by linking parking spaces to a parking site
Reservations	Indirect by attribute 'nextAvailableTimeSlot'
Accessibility information	Is available for a Parking Space

Note that a **ParkingSpace** has only got limited properties. For example, you cannot specify its operator, equipment, opening times or tariffs. If you want to do so, you have to specify the corresponding Parking Site (with the properties mentioned above) and to link the Parking space to it by using the **parkingSiteReference** attribute.



«enumeration,D2Enumeration»  
UserTypeEnum

«D2Literal»  
allUsers  
shoppers  
hotelGuests  
subscribers  
reservationHolders  
seasonTicketHolders  
registeredDisabledUsers  
disabled  
handicapped  
hearingImpaired  
visuallyImpaired  
wheelchairUsers  
elderlyUsers  
families  
men  
women  
pregnantWomen  
pensioners  
students  
staff  
employees  
customers  
visitors  
members  
shortTermParker  
longTermParker  
overnightParker  
sportEventAwaySupporters  
sportEventHomeSupporters  
residents  
commuters  
parkAndRideUsers  
parkAndWalkUser  
parkAndCycleUser  
unknown  
other

(from D2Payload::PayloadPublication::  
SituationPublicationLight)

«enumeration,D2Enumeration»  
VehicleTypeEnum

«D2Literal»  
agriculturalVehicle  
anyVehicle  
articulatedBus  
articulatedTrolleyBus  
articulatedVehicle  
bicycle  
bus  
car  
caravan  
carOrLightVehicle  
carWithCaravan  
carWithTrailer  
constructionOrMaintenanceVehicle  
fourWheelDrive  
heavyGoodsVehicle  
heavyGoodsVehicleWithTrailer  
heavyDutyTransporter  
heavyVehicle  
highSidedVehicle  
lightCommercialVehicle  
largeCar  
largeGoodsVehicle  
lightCommercialVehicleWithTrailer  
lorry  
metro  
minibus  
moped  
motorcycle  
motorcycleWithSideCar  
motorhome  
motorscooter  
passengerCar  
smallCar  
tanker  
threeWheeledVehicle  
trailer  
tram  
trolleyBus  
twoWheeledVehicle  
van  
vehicleWithCaravan  
vehicleWithCatalyticConverter  
vehicleWithoutCatalyticConverter  
vehicleWithTrailer  
withEvenNumberedRegistrationPlates  
withOddNumberedRegistrationPlates  
unknown  
other

(from D2Payload::Common::Enumerations)

«enumeration,D2Enumeration»  
FuelTypeEnum

«D2Literal»  
all  
battery  
biodiesel  
diesel  
dieselBatteryHybrid  
ethanol  
hydrogen  
liquidGas  
lpg  
methane  
petrol  
petrol95Octane  
petrol98Octane  
petrolBatteryHybrid  
petrolLeaded  
petrolUnleaded  
unknown  
other

(from D2Payload::Common::Enumerations)