**DATEX II profile for Intelligent Truck Parking EU compliant – Dynamic part**

**ASFINAG**

Version 00-02-00

* 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.

* 1. Data Dictionary for "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part"
     1. "GenericPublication" package
        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

* + - 1. "GenericPublication" package association roles

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

* + - 1. "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

* + 1. "ParkingRecordStatus" package
       1. "ParkingRecordStatus" package classes

| **Class name** | **Designation** | **Definition** | **Stereotype** | **Abstract** |
| --- | --- | --- | --- | --- |
| GroupOfParkingSpacesStatus | Group of parking spaces status | The status of the assigned parking spaces in the specified parking site, i.e. the status of those spaces assigned for particular types of person or vehicle and/or for specific duration types (e.g. short stay). |  | no |
| ParkingOccupancy | Parking occupancy | Parking capacity information for the parking site as well as for AssignedParkingSpaces. |  | no |
| ParkingRecordStatus | Parking record status | Contains the current status of one parking record defined in the static model (i.e. parking site or group of parking sites) or historical or forecasted data for one parking. Only for the second case, 'parkingStatusTime' must be specified. |  | yes |
| ParkingSiteStatus | Parking site status | Dynamic status information for the static object 'ParkingSite'. |  | no |

Table 3— Classes of the "ParkingRecordStatus" package

* + - 1. "ParkingRecordStatus" package association roles

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

* + - 1. "ParkingRecordStatus" package attributes

| **Class name** | **Attribute name** | **Designation** | **Definition** | **Multiplicity** | **Type** |
| --- | --- | --- | --- | --- | --- |
| GroupOfParkingSpacesStatus | groupOfParkingSpacesClosed | Group of parking spaces closed | True: The group of parking spaces is closed / not accessible. False or omitted: The group of parking spaces is accessible. This is no statement about its occupation. | 0..1 | Boolean |
| ParkingOccupancy | parkingNumberOfSpacesOverride | Parking number of spaces override | Possibility to override the static value 'parkingNumberOfSpaces'. | 0..1 | NonNegativeInteger |
|  | parkingNumberOfVacantSpaces | Parking number of vacant spaces | The total number of currently vacant parking spaces available in the specified parking site, group of parking sites or group of parking spaces. | 0..1 | NonNegativeInteger |
| ParkingRecordStatus | parkingRecordReference | Parking record reference | A reference to a static parking record object, i.e. a parking site or a group of parking sites. | 1..1 | VersionedReference |
|  | parkingStatusDescription | Parking status description | Additional textual information about the parking status. Can also be used as an alternative in case the enumeration values for 'parkingSiteStatus' or 'groupOfParkingSitesStatus' do not fit. | 0..1 | MultilingualString |
|  | parkingStatusOriginTime | Parking status origin time | The time when the information in this message was generated. Unless 'ParkingStatusValidity' is used, this is also the time the information in this message refers to. | 1..1 | DateTime |
| ParkingSiteStatus | parkingSiteOpeningStatus | Parking site opening status | The opening status of the parking site (open or not). | 1..1 | OpeningStatusEnum |
|  | parkingSiteStatus | Parking site status | The status of the parking site (spaces available or not). | 1..1 | ParkingSiteStatusEnum |

Table 4— Attributes of the "ParkingRecordStatus" package

* + 1. "ParkingStatusPublication" package
       1. "ParkingStatusPublication" package classes

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

Table 5— Classes of the "ParkingStatusPublication" package

* + - 1. "ParkingStatusPublication" package association roles

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

* + - 1. "ParkingStatusPublication" package attributes

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

Table 6— Attributes of the "ParkingStatusPublication" package

* 1. Data Dictionary of <<datatypes>> for "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part"

There are no defined datatypes used in the "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part".

* 1. Data Dictionary of <<enumerations>> for "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part"

This clause contains the definitions of all enumerations which are used in the "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part".

* + 1. The <<enumeration>> "OpeningStatusEnum"

The opening status of some entity (e.g. parking site, service facility, access,...)

| **Enumerated value name** | **Designation** | **Definition** |
| --- | --- | --- |
| closed | Closed | Closed, usually because of the regular opening times. |
| closedAbnormal | Closed abnormal | Closed because of some scheduled or unscheduled event, like holiday, maintenance, construction works or any kind of problems. It is possible that the closure will last for some time. |
| open | Open | Open resp. available. |
| openingTimesInForce | Opening times in force | The normal opening times are in force, i.e. it is not explicit said if it's open right now. |
| other | Other | Other. |
| statusUnknown | Status unknown | The opening status is unknown. |

Table 7— Values contained in the enumeration "OpeningStatusEnum"

* + 1. The <<enumeration>> "ParkingSiteStatusEnum"

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

| **Enumerated value name** | **Designation** | **Definition** |
| --- | --- | --- |
| almostFull | Almost full | The parking site is almost full (as defined by its configuration parameters). |
| full | Full | The parking site is full (as defined by its configuration parameters). |
| fullAtEntrance | Full at entrance | The parking site is considered full at its entrance (e.g. full sign is displayed at entrance or on managing VMS). |
| other | Other | Other. |
| spacesAvailable | Spaces available | Parking spaces are currently available. |
| unknown | Unknown | The status of the parking site is unknown. |

Table 8— Values contained in the enumeration "ParkingSiteStatusEnum"

* 1. Alphabetical list of attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute name** | **Class name** | **Designation** | **Definition** | **Multiplicity** | **Type** |
| genericPublicationName | GenericPublication | Generic publication name | The name of the generic publication. | 1..1 | String |
| groupOfParkingSpacesClosed | GroupOfParkingSpacesStatus | Group of parking spaces closed | True: The group of parking spaces is closed / not accessible. False or omitted: The group of parking spaces is accessible. This is no statement about its occupation. | 0..1 | Boolean |
| parkingNumberOfSpacesOverride | ParkingOccupancy | Parking number of spaces override | Possibility to override the static value 'parkingNumberOfSpaces'. | 0..1 | NonNegativeInteger |
| parkingNumberOfVacantSpaces | ParkingOccupancy | Parking number of vacant spaces | The total number of currently vacant parking spaces available in the specified parking site, group of parking sites or group of parking spaces. | 0..1 | NonNegativeInteger |
| parkingRecordReference | ParkingRecordStatus | Parking record reference | A reference to a static parking record object, i.e. a parking site or a group of parking sites. | 1..1 | VersionedReference |
| parkingSiteOpeningStatus | ParkingSiteStatus | Parking site opening status | The opening status of the parking site (open or not). | 1..1 | OpeningStatusEnum |
| parkingSiteStatus | ParkingSiteStatus | Parking site status | The status of the parking site (spaces available or not). | 1..1 | ParkingSiteStatusEnum |
| parkingStatusDescription | ParkingRecordStatus | Parking status description | Additional textual information about the parking status. Can also be used as an alternative in case the enumeration values for 'parkingSiteStatus' or 'groupOfParkingSitesStatus' do not fit. | 0..1 | MultilingualString |
| parkingStatusOriginTime | ParkingRecordStatus | Parking status origin time | The time when the information in this message was generated. Unless 'ParkingStatusValidity' is used, this is also the time the information in this message refers to. | 1..1 | DateTime |
| parkingTableReference | ParkingStatusPublication | Parking table reference | It is possible to limit the publication to one or more ParkingTable and to set a reference to these tables here. | 0..\* | VersionedReference |

Table 9- Alphabetical list of attributes

* 1. Alphabetical list of roles

There are no defined roles used in the "ASFINAG Intelligent Truck Parking EU complaint - Dynamic Part".

* 1. Figure



Figure 1 - ParkingStatusPublication