Austrian Planned Events Profile

Version 2.1

A.1 Introduction

ASFINAG provides DATEX II traffic data of Austrian motorways and highways for service providers to be distributed to vehicles.

This document describes the Austrian planned events Profile. Planned events cover a wide range of event types that have potential to cause short and long term service disruptions to the road users. These include for example: construction works, traffic jams due to public events (e.g. marathons, bicycle races, etc.), lane or carriage way management actions instigated by traffic operators, etc. This profile uses the DATEX II SituationPublication.

Most of the planned events contains general information such as the event type, spatial and temporal extent of the event. However, for some events such as construction and road maintenance works (or simply roadworks) a detailed data about location, schedule, lane restrictions and speed limits of the roadworks are provided.

A.2 General structure of planned events

Code listing 1 shows an example of a planned event encoded in DATEXII. Like mentioned in the previous Section the most general (or mandatory) data such as the event type, validity date times, location information, and event text are provided. In addition, the impact that the event would have on the road users may also be provided using the "Impact" element. Note that the details within the location element (GroupOfLocation) are not shown in this example. The complete example is available in the zip package.

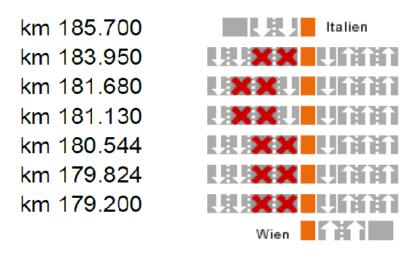
```
<?xml version="1.0" encoding="utf-8"?>
<ns:d2LogicalModel modelBaseVersion="2" xmlns:ns="http://datex2.eu/schema/2/2 0">
 <ns:exchange>
   <ns:supplierIdentification>
     <ns:country>at</ns:country>
     <ns:nationalIdentifier>ASFINAG</ns:nationalIdentifier>
   </ns:supplierIdentification>
 </ns:exchange>
 <ns:payloadPublication d2p1:type="ns:SituationPublication" lang="de-at">
   <ns:publicationTime>2018-07-06T10:51:56+02:00</ns:publicationTime>
   <ns:publicationCreator>
     <ns:country>at</ns:country>
     <ns:nationalIdentifier>ASFINAG/ns:nationalIdentifier>
   </ns:publicationCreator>
   <ns:payloadPublicationExtension>
     <ns:payloadPublicationExtended>
       <ns:languageInfo>
         <ns:mainLanguage>de-at</ns:mainLanguage>
         <ns:translation>en</ns:translation>
       </ns:languageInfo>
     </ns:payloadPublicationExtended>
   </ns:pavloadPublicationExtension>
   <ns:situation id="GUID-99999453929" version="1">
     <ns:headerInformation>
       <ns:confidentiality>noRestriction/ns:confidentiality>
       <ns:informationStatus>real</ns:informationStatus>
     </ns:headerInformation>
     <ns:situationRecord d2p1:type="ns:PublicEvent" id="GUID-647398393" version="1">
       <ns:situationRecordCreationTime>2018-07-06T10:51:56+02:00/ns:situationRecordCreationTime>
       <ns:situationRecordVersionTime>2018-07-06T10:51:56+02:00/ns:situationRecordVersionTime>
       <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
       <ns:validity>
         <ns:validityStatus>definedByValidityTimeSpec</ps:validityStatus>
```

```
<ns:validityTimeSpecification>
           <ns:overallStartTime>2018-07-15T06:00:00+02:00/ns:overallStartTime>
           <ns:overallEndTime>2018-07-15T21:00:00+02:00/ns:overallEndTime>
         </ns:validityTimeSpecification>
       </ns:validity>
       <ns:impact>
         <ns:numberOfOperationalLanes>0</ns:numberOfOperationalLanes>
         <ns:trafficConstrictionType>roadBlocked</ns:trafficConstrictionType>
       </ns:impact>
       <ns:generalPublicComment>
         <ns:comment>
           <ns:values>
             <ns:value lang="de-at">
               Total sperre in beiden Richtungen zwischen ASt Bad St.Leonhard und ASt Wolfsberg,
               wegen Fahrradrennen
             </ns:value>
             <ns:value lang="en">
               Road blocked in both directions between Junction Bad St.Leonhard and Junction
               Wolfsberg North due to bicycle race
             </ns:value>
           </ns:values>
         </ns:comment>
       </ns:generalPublicComment>
       <ns:groupOfLocations d2p1:type="ns:Linear">
         <ns:alertCLinear d2p1:type="ns:AlertCMethod4Linear"/>
         <ns:linearWithinLinearElement/>
         <ns:linearExtension>
           <ns:extendedLinear>
             <ns:linearByCoordinates/>
           </ns:extendedLinear>
           <ns:extendedLinearForGipLink/>
         </ns:linearExtension>
       </ns:groupOfLocations>
       <ns:publicEventType>bicycleRace</ns:publicEventType>
     </ns:situationRecord>
   </ns:situation>
 </ns:payloadPublication>
</ns:d2LogicalModel>
```

Code listing 1: General structure of a planned event in DATEX II

A.3 Structure of the Roadwork events in DATEX II

Compared to other planned events the roadworks, especially the long-term roadworks contains more detailed data corresponding to their location, schedule, lane restrictions, and temporary speed limits. The Roadworks are divided into phases (the temporal extent of a section), which are further subdivided into sections (spatial extent). This is illustrated in *Figure 1*.



Action	General Refurbishment	
Overall duration	24.03.17 07:00 - 23.10.18 20:00	
Phase	4a	
Duration of Phase	29.06.18 08:00 - 16.07.18 20:00	
Road	A02	A02
Direction	Vienna	Italy
Location	KN Graz Ost - Kn Graz West	Kn Graz West - Kn Graz Ost
Speed Limit	80 km/h	80 km/h

Figure 1: Lane restrictions caused by roadworks

The example shows a phase of a roadwork that is part of a general refurbishment on motorway A02. In the direction to Vienna two lanes are blocked, while in the direction to Italy an additional lane in counter direction has been assigned. The speed limit in the roadwork section is 80 km/h.

The roadwork events contain the following data:

- Spatial extent of construction/maintenance zones is provided using WGS84 coordinates, ALERTC location codes, Reference points and GIP links. The location reference methods used are described in Section **A.4**.
- Detailed schedule of roadworks operation times
- Number of blocked and usable lanes as well as contraflow areas for all sub sections of the construction zone
- Phase IDs of roadwork sections
- In addition to the detailed roadwork, the summary of a roadwork and its phases are provided as level b extensions.

Figure 2 shows an ASFINAG's DATEX II feed for roadwork events. The complete example is too big to put in this document, so the example is divided into parts to show relevant sections. The complete example is available in the zip package.

```
<?xml version="1.0" encoding="utf-8"?>
      = <ns:d2LogicalModel modelBaseVersion="2" xmlns:ns="http://datex2.eu/schema/2/2 0">
      (ns:exchange)
      | <ns:payloadPublication d2p1:type="ns:SituationPublication" lang="de-at" xmlns:d2p1="http://www.w3.org
            <ns:publicationTime>2017-07-18T09:08:12+02:00</ns:publicationTime>
 10
 11
           <ns:publicationCreator>
           <ns:situation id="RW C 2074653" version="1">
 15
            <ns:situation id="RW C 2088358" version="0">
327
493
           <ns:situation id="RW C 2088328" version="1">
           <ns:situation id="RW C 2074160" version="1">
662
964
            <ns:situation id="RW C 2086480" version="1">
            <ns:situation id="RW C 2073193" version="2">
4119
            <ns:situation id="RW C 2073309" version="2">
4288
            <ns:situation id="RW C 2083963" version="0">
           <ns:situation id="RW C 2081485" version="1">
```

Figure 2: ASFINAG's Roadwork data feed in DATEX II.

Each *situation* element represents a single roadwork or a construction zone. The actual information is contained in a number of *situationRecord* elements as shown in *Figure 3*. Each situation record represents a sub section of the roadwork area. The attribute *type* indicates the type of roadwork.

Figure 3: Situation and situationRecord elements

Figure 4 shows an example situationRecord that contains the actual data of a roadwork section. The situationRecordCreationTime contains the create-timestamp of the roadwork entry (version 1) and the situationRecordVersionTime contains the create-timestamp of the current version.

```
<ns:situationRecord d2p1:type="ns:MaintenanceWorks" id="371433R" version="0">
104558
                  <ns:situationRecordCreationTime>2017-07-14T07:51:27+02:00/ns:situationRecordCreationTime>
104559
                 <ns:situationRecordVersionTime>2017-07-14T07:51:27+02:00</ns:situationRecordVersionTime>
104560
                  <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
104561
                  <ns:validityStatus>definedByValidityTimeSpec</ns:validityStatus>
104562
104563
                  <ns:validityTimeSpecification>
104564
                    <ns:overallStartTime>2017-09-19T19:00:00+02:00/ns:overallStartTime>
104565
                    <ns:overallEndTime>2017-09-21T05:30:00+02:00</ns:overallEndTime>
104566
                    <ns:validPeriod>
104567
                     <ns:recurringTimePeriodOfDay d2p1:type="ns:TimePeriodByHour">
104568
                        <ns:startTimeOfPeriod>19:00:00</ns:startTimeOfPeriod>
104569
                         <ns:endTimeOfPeriod>05:30:00</ns:endTimeOfPeriod>
104570
                       </ns:recurringTimePeriodOfDay>
104571
                     </ns:validPeriod>
104572
                   </ns:validityTimeSpecification>
104573
                  </ns:validity>
104574
                 <ns:impact>
104575
                   <ns:numberOfLanesRestricted>1</ns:numberOfLanesRestricted>
104576
                   <ns:numberOfOperationalLanes>1</ns:numberOfOperationalLanes>
104577
                   <ns:originalNumberOfLanes>2</ns:originalNumberOfLanes>
104578
                   <ns:trafficConstrictionType>lanesBlocked</ns:trafficConstrictionType>
104579
                  </ns:impact>
104580
                  <ns:generalPublicComment>
104587
                  <ns:generalPublicComment>
104588
                   <ns:comment>
104589
                     <ns:values>
                      <ns:value lang="en">in direction Wien/Auhof at ASt Oberwang refurbishment</ns:value>
                     </ns:values>
104592
                   </ns:comment>
104593
                  </ns:generalPublicComment>
                  <ns:groupOfLocations d2p1:type="ns:Linear">
104594
104595
                   <ns:supplementaryPositionalDescription>
104596
                     <ns:affectedCarriagewayAndLanes>
104597
                      <ns:carriageway>mainCarriageway</ns:carriageway>
104598
                      <ns:lane>hardShoulder</ns:lane>
104599
                       <ns:lane>lane1</ns:lane>
104600
                     </ns:affectedCarriagewayAndLanes>
```

Figure 4: Example of a situationRecord (shown without location referencing elements)

The *validityTimeSpecification* may contain a detailed schedule which describes the temporal validity of the *situationRecord*. *Figure 4* illustrates that the general period of the roadwork that starts at 2017-09-19 19:00:00 (element *overallStartTime*) and ends at 2017-09-21 05:30:00 (element *overallEndTime*). The element *validPeriod* contains the detailed schedule of operation for the described roadwork. The example shows a roadwork that operates daily from 19:00 to 05:30. Note that the *validPeriod* element can contain any number of elements of type *Period* as defined in the DATEX II schema.

The *impact* element in *Figure 4* contains information about lane and carriageway restrictions. The *numberOfLanesRestricted* element contains the number of lanes (excluding hard shoulder) where the constriction applies. The *numberOfOperationalLanes* element contains the number of lanes available for the flowing traffic (this may include the hard shoulder if it is being used as an operational lane). The *originalNumberOfLanes* element contains the original number of available lanes (excluding hard shoulder). The type of constriction is defined in the *trafficConstrictionType* element. In addition the *affectedCarriageWayAndLanes* element (also shown in *Figure 4*) contains further information about carriageway and lanes affected by the roadwork. In this example lane1 (the rightmost lane) and the hard shoulder (in Austria all hard shoulders are located on the right of lane1) are affected. The *generalPublicComment* element contains a textual description of the roadwork which is usually available in German and English.

```
14043
               <ns:situationRecord d2p1:type="ns:RoadOrCarriagewayOrLaneManagement" id="370438R" version="0">
14044
                 <ns:situationRecordCreationTime>2017-07-17T00:02:26+02:00/ns:situationRecordCreationTime>
14045
                 <ns:situationRecordVersionTime>2017-07-17T00:02:26+02:00</ns:situationRecordVersionTime>
14046
                 <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
14047
14054
                 <ns:impact>
14058
                 <ns:groupOfLocations d2p1:type="ns:Linear">
14117
                 <ns:complianceOption>advisory</ns:complianceOption>
14118
                 <ns:roadOrCarriagewayOrLaneManagementType>contraflow</ns:roadOrCarriagewayOrLaneManagementType>
14119
               </ns:situationRecord>
```

Figure 5: SituationRecord that describes a contraflow subsection

Some roadwork zones contain contraflow sections. This is indicated in the roadOrCarriagewayOrLaneManagementType element as shown in Figure 5.

Figure 6: Extension to add PhaseReferenceld to the situation record

Each roadwork subsection that is described in the situation record is associated with a roadwork phase. Therefore, the phase id is added to the situation record as a level b extension. The extension is called as "phaseReferenceId". This is illustrated in Figure 6. This also helps to associate the roadwork section described in the situation record with the phase summary in the "overallPhaseSituation" extension (See Chapter A.5).

A.4 Location Referencing

The below table describes the location referencing methods used by ASFINAG to locate the planned events. All locations are provided as linear by at least two points (start point, end point, and optional intermediate points). Note, that in case of single point locations the end point contains the same value as the start point (i.e., start=end).

Location Referencing	DATEX II element	Description
AlertC location codes	AlertCLinear	The alertCLinear element contains the primary location code, secondary location code, AlertC direction, and offset distances of the corresponding primary and secondary location.
Linear location referencing using predefined reference points (or referents)	LinearWithinLinearElement	Describes the location of the event using predefined reference points and offset distances to the reference points. The linear element is defined as a sequence of reference points, where each reference point is called a "Referent". And the "from" and "to" points are defined as distances from first and last referents of the linear element.
WGS84	LinearByCoordinates (level b extension)	Describes the absolute position of the "begin" and "end" point location of the event. This is a level b extension.
GIP	GIPLinkLinearLocationReferencing (level b extension)	Location reference of GIP (Graph Integration Platform). GIP provides a digital map of Austria's transport network to all authorities. GIP is a proprietary location referencing format used and well known in Austria. It is also a level b extension.

A.4.1 AlertC Location referencing example¹

Below figure illustrates a section of maintenance works on A09, between "Gersdorf" (Km 226) and "Vogau-Straß" (km 222). The length of the roadwork is 2 km. The relevant AlertC location codes are also presented.

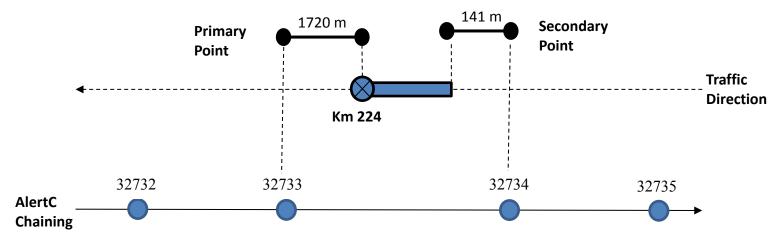


Figure 7: AlertC location referencing in DATEX II

The primary point (or primary location code) is the end point (called as the "head") of the roadworks section, whereas the secondary point (or secondary location code) is the begin point (called as the "tail") of the roadworks section. The primary point is at a distance of 1720 metres from the actual point (head). The secondary point is at a distance of 141 metres from actual point (tail). The direction of the AlertC coding is opposite to the direction of the traffic flow, therefore the direction AlertC direction is "negative". The same example is encoded in DATEX II as shown below (only the AlertC part is shown):

-

¹ http://d2docs.ndwcloud.nu/ static/data/v2.3/DATEXII-UserGuide.pdf

```
<groupOfLocations xsi:type="Linear">
  <alertCLinear xsi:type="AlertCMethod4Linear">
    <alertCLocationCountryCode>10</alertCLocationCountryCode>
    <alertCLocationTableNumber>1</alertCLocationTableNumber>
    <alertCLocationTableVersion>3.1</alertCLocationTableVersion>
    <alertCDirection>
      <alertCDirectionCoded>negative</alertCDirectionCoded>
    </alertCDirection>
    <alertCMethod4PrimaryPointLocation>
      <alertCLocation>
        <specificLocation>32733</specificLocation>
      </alertCLocation>
      <offsetDistance>
        <offsetDistance>1720</offsetDistance>
      </offsetDistance>
    </alertCMethod4PrimaryPointLocation>
    <alertCMethod4SecondaryPointLocation>
      <alertCLocation>
        <specificLocation>32734</specificLocation>
      </alertCLocation>
      <offsetDistance>
        <offsetDistance>141</offsetDistance>
      </offsetDistance>
    </alertCMethod4SecondaryPointLocation>
  </alertCLinear>
</groupOfLocations>
```

A.4.2 LinearWithinLinear using "LinearElementByPoints" example²

The below figure illustrates an example of a roadwork section described using linear element by points or referents, where a "Referent" is defined as "A referent on a linear object that has a known location such as a node, a reference marker, and intersection etc." Each referent has an identifier (e.g. 461006651, 461006652, etc.), and a point location. The LinearWithinLinear location referencing also contains a "fromPoint" and a "toPoint". Both the fromPoint and toPoint are of type "DistanceFromLinearElementReferent", which is defined as the "Distance of a point along a linear element measured from a "from

-

² http://d2docs.ndwcloud.nu/_static/data/v2.3/DATEXII-UserGuide.pdf

referent" on the linear element, in the sense relative to the linear element definition rather than the direction of traffic flow or optionally towards a "towards referent".

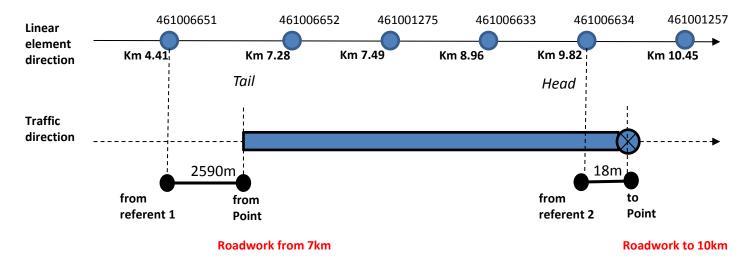


Figure 8: LinearWithinLinear (linear element by referents) location referencing in DATEX II

The same example is encoded in DATEX II as shown below:

```
<groupOfLocations xsi:type="Linear">
 <linearWithinLinearElement>
   <directionRelativeOnLinearSection>aligned</directionRelativeOnLinearSection>
   <!--Linear element defined as a sequence of referents-->
   clinearElement xsi:type="LinearElementByPoints">
     earElementReferenceModel>GIP AT Stand Oktober 2018
     earElementReferenceModelVersion>GIPAT1810/linearElementReferenceModelVersion>
     <startPointOfLinearElement>
       <referentIdentifier>RP1</referentIdentifier>
       <referentName>reference point 1</referentName>
       <referentType>referenceMarker</referentType>
       <pointCoordinates>
         <latitude>44.94947</latitude>
         <longitude>16.49383</longitude>
       </pointCoordinates>
     </startPointOfLinearElement>
     <intermediatePointOnLinearElement index="1">
         <referentIdentifier>RP2</referentIdentifier>
         <referentName>reference point 2</referentName>
         <referentType>referenceMarker</referentType>
         <pointCoordinates>
           <latitude>44.9844947</latitude>
           <longitude>16.4959383</longitude>
         </pointCoordinates>
       </referent>
     </intermediatePointOnLinearElement>
     <intermediatePointOnLinearElement index="2">
       (referent)
         <referentIdentifier>RP3</referentIdentifier>
         <referentName>reference point 3</referentName>
         <referentType>referenceMarker</referentType>
         <pointCoordinates>
           <latitude>44.9843347</latitude>
           <longitude>16.4958383</longitude>
         </pointCoordinates>
       </referent>
     </intermediatePointOnLinearElement>
     <endPointOfLinearElement>
       <referentIdentifier>RP4</referentIdentifier>
       <referentName>reference point 4</referentName>
       <referentType>referenceMarker</referentType>
       <pointCoordinates>
         <latitude>44.9495547</latitude>
         <longitude>16.4955383</longitude>
       </pointCoordinates>
     </endPointOfLinearElement>
    </linearElement>
```

```
<!--From point-->
   <fromPoint xsi:type="DistanceFromLinearElementReferent">
     <distanceAlong>100</distanceAlong>
     <!--from referent as defined in the linear element-->
      <fromReferent>
       <referentIdentifier>RP1</referentIdentifier>
       <referentName>reference point 1</referentName>
       <referentType>referenceMarker</referentType>
       <pointCoordinates>
         <latitude>44.94947
         <longitude>16.49383</longitude>
       </pointCoordinates>
     </fre>
   </fremPoint>
   <!--To point-->
   <toPoint xsi:type="DistanceFromLinearElementReferent">
     <distanceAlong>150</distanceAlong>
     <!--from referent as defined in the linear element-->
      <fromReferent>
       <referentIdentifier>RP4</referentIdentifier>
       <referentName>reference point 4</referentName>
       <referentType>referenceMarker</referentType>
       <pointCoordinates>
         <latitude>44.9495547
         <longitude>16.4955383</longitude>
       </pointCoordinates>
     </fre>
   </toperint>
  </linearWithinLinearElement>
</groupOfLocations>
```

A.4.3 LinearByCoordinates example

The LinearByCoordinates³ is a level b extension that describes the location of a linear event using absolute latitude and longitude points. It contains mandatory "start" point and "end" point, and optionally one or more "intermediate points".

Below is an example in DATEX II:

³ https://datex2.eu/content/linear-coordinates

```
<groupOfLocations xsi:type="Linear">
 <linearExtension>
   <extendedLinear>
     <linearByCoordinates>
       <roadNumber>A02</roadNumber>
       <start>
         <latitude>48.0602341
         <longitude>16.3403034</longitude>
       </start>
       <end>
         <latitude>48.09803</latitude>
         longitude>16.3225384</longitude>
     </linearByCoordinates>
   </extendedLinear>
 </linearExtension>
</groupOfLocations>
```

A.4.4 GipLinkLinearLocationReference example

The GIP (Graph Integration Platform) serves as the basis for an intermodal geographic information system for the transportation network in Austria. Though the GIP location referencing is standardized all over Austria, it is not known by other countries. Therefore, we have created a level b extension to provide the GIP location referencing. Below is an example in DATEX II:

```
<groupOfLocations xsi:type="Linear">
 <linearExtension>
   <extendedLinearForGipLink>
      <gipLinkLinearLocationReference version="1612" name="gipat_1612_linknetz_hotfix">
       <gipLink index="1">
          <gipLink>
            kId>461000808</linkId>
            <linkPercentageFrom>
              <percentageDistanceAlong>1</percentageDistanceAlong>
            </linkPercentageFrom>
            <linkPercentageTo>
              <percentageDistanceAlong>100</percentageDistanceAlong>
            </linkPercentageTo>
            <referenceDirection>toFrom</referenceDirection>
          </gipLink>
        </gipLink>
        <gipLink index="2">
          <gipLink>
            kId>461006111</linkId>
            <linkPercentageFrom>
              <percentageDistanceAlong>1.6</percentageDistanceAlong>
            </linkPercentageFrom>
            <linkPercentageTo>
              <percentageDistanceAlong>100</percentageDistanceAlong>
            </linkPercentageTo>
            <referenceDirection>toFrom</referenceDirection>
          </gipLink>
        </gipLink>
      </gipLinkLinearLocationReference>
   </extendedLinearForGipLink>
 </linearExtension>
```

A.5 OverallSituation and OverallPhaseSituation Extensions

Some of the planned events for example roadworks, bicycle races, etc. may contain very detailed data, such as the phase and restriction data (explained in Section **A.3**). These detailed data for planned events may not be of interest to all kind of customers. Therefore, for customers who are interested more on an overview rather than the very details of an event, a summary is provided. This summary describes the most general information of an event (and of its phases). They are provided in the "situation" element via the level b extensions. The summary of a planned event (via overallSituation) includes the following details:

- ID of the event
- Overall start and end time of the event
- The spatial coverage of the event (or location of the event)
- Textual description of the event (in English and German), and
- The type of the event (e.g. maintenance work, repair work, construction work, etc.)

If the event contains phases (e.g. roadwork phase), then the summaries of the phases are also provided (via overallPhaseSituation). It includes the following details:

- Phase reference id
- Overall start and end time of the phase
- The spatial coverage of the phase (or location of the phase)
- Textual description of the roadwork (in English and German), and
- The type of the event (e.g. maintenance work, repair work, construction work, etc.)

Figure 7 illustrates the data structure of the "overallSituation" and "overallPhaseSituation" extensions. They are just instances of "SituationRecord".

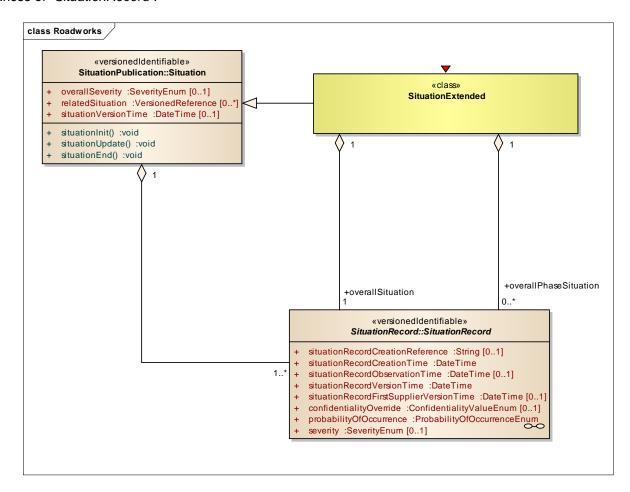


Figure 9: overallSituation and overallPhaseSituation extensions

A.6 Other Level B extensions

The level b extensions for Austrian planned events profile are summarised in this chapter.

A.6.1 PayloadPublicationExtensions

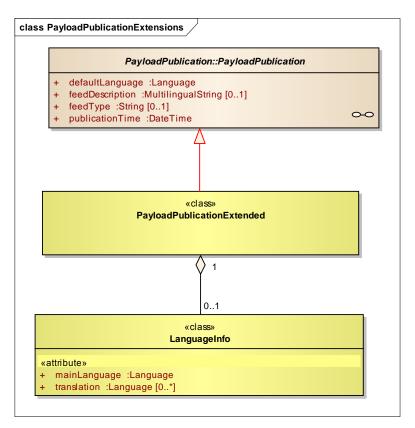


Figure 10: Extension to the class PayloadPublication to add language information

The class "LanguageInfo" provides the main language and the available translations in which the text content is encoded. For example, using "MultilingualString" class a single text can be described in multiple languages. Using the language info the receiver can identify the source language and the translations of the textual content of the message.

A.6.2 SituationExtensions

The Situation class is extended to add the "overallSituation" and the "overallPhaseSituation" extensions. Refer to Section A3.1.

A.6.3 SituationRecordExtensions

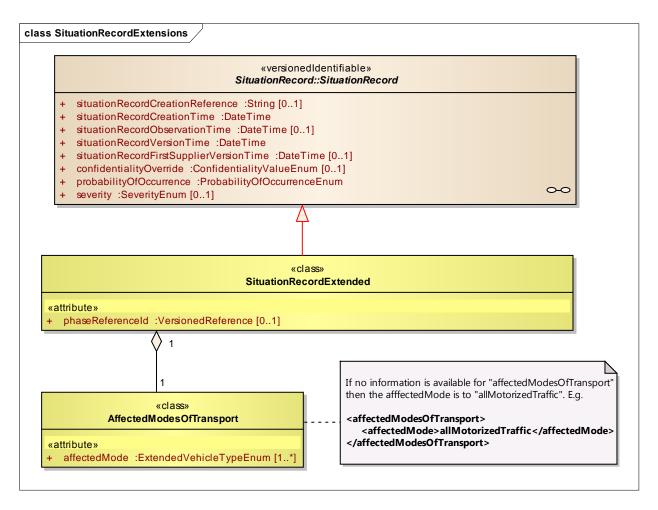


Figure 11: Extension to the class PayloadPublication to add language information

The following data elements are added to the SituationRecord class:

- PhaseReferenceId: Contains the phase reference id that is associated with the planned event.
- AffectedModesOfTransport: Specifies the modes of transportation that are affected by the planned event. For example: trucks, cars, buses, trucks over 7.5 tons, etc. If no information is available then it is set to "allMotorizedTraffic" by default.

A.6.4 GroupOfLocationsExtensions

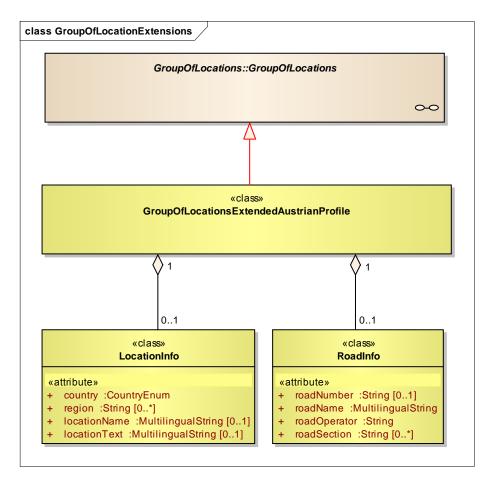


Figure 12: Extensions for GroupOfLocations

The following classes are added to the GroupOfLocations class:

- **LocationInfo**: Specifies the information such as country and region (or regions), where the event lies. In addition it also specifies the custom location name (locationName) and free text (locationText) related to the location of the traffic message.
- RoadInfo: Specifies the information related to the Road, such as road number, road name, operator name, and one or more road sections

A.6.5 GipLinkExtensions

To add the GIP location referencing the *Linear*, *Point*, and the *ItineraryByIndexedLocations* classes are extended. The GIP location referencing method is composed of one or more GIP nodes. Each GIP node is represented as a GIPLink, which contains an id, reference direction, a begin offset (in percentage) and an end offset (in percentage). Note that the GIP is a proprietary standard used by multiple stake holders within Austria. In addition to these details clients also require the shape files of the GIP digital map to interpret the location.

A.6.5.1 GipLinkLinearExtension

This extension specifies the linear location of a traffic message by one or more GIP links.

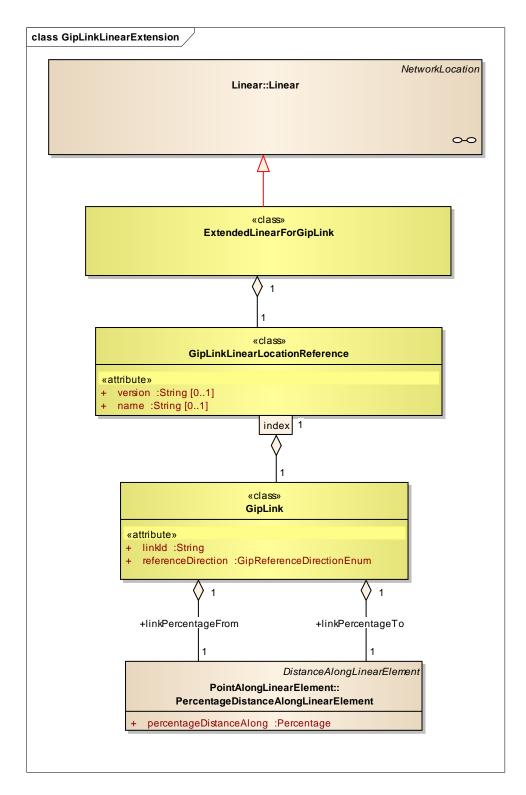


Figure 13: GipLinkLinear extension

A.6.5.2 GipLinkltineraryExtension

This extension specifies the itinerary or a route of a traffic message by an arbitrary number of GIP links.

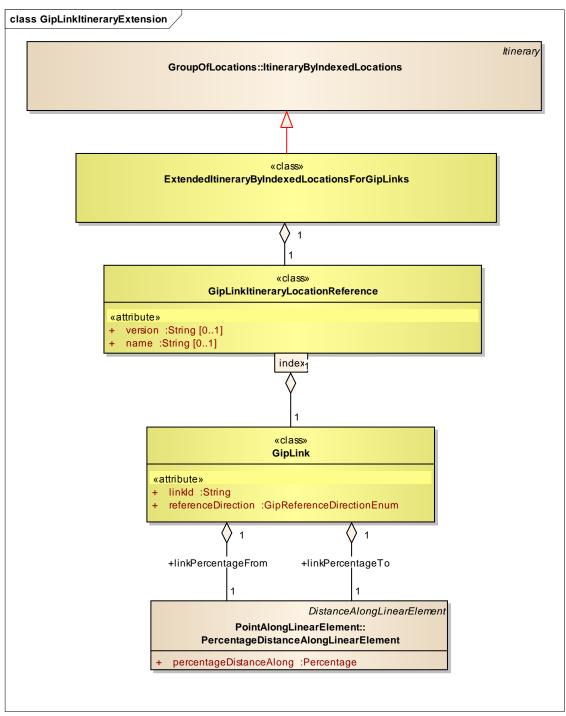


Figure 14: GipLinkltinerary extension

A.6.5.3 GipLinkPointExtension

This extension specifies the point location of a traffic message by one or more GIP links. In most cases one GIP link is sufficient to represent the point location, however for a point at intersection there may be more than one GIP link.

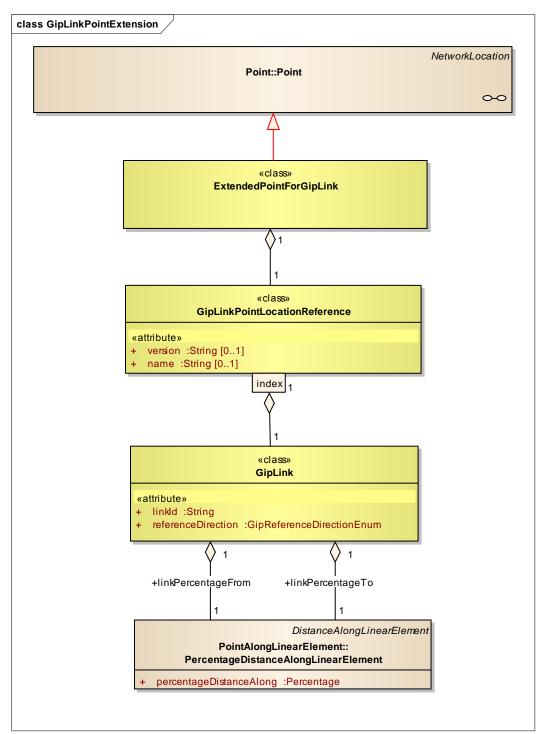


Figure 15: GipLinkPoint extension

A.6.6 LinearByCoordinates

The *linearByCoordinates* extension is not a proprietary extension from ASFINAG. It has been available on the datex2.eu⁴ platform, and it is imported into the Austrian profiles. This extension allows you to specify linear locations

⁴ http://www.datex2.eu/content/linear-coordinates

by a number of points represented by coordinates. There must be a start and an end point with an arbitrary number of intermediate points. The provision of intermediate points are optional.

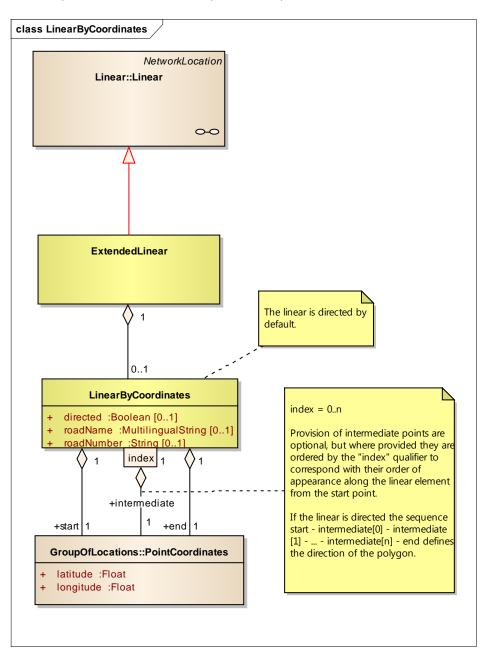


Figure 16: LinearByCoordinates extension

A.7 Data Dictionary for "AustrianPlannedEventsProfile"

In this document all data elements that are supported by ASFINAG are marked in green colour. Other elements, attributes, enumeration and enumeration literals are left open for future use.

A.7.1 "Activity" package

A.7.1.1 "Activity" package classes

Class name	Designation	Definition	Stereotype	Abstract
Activity	Activity	Deliberate human action external to the traffic stream or roadway which could disrupt traffic.		<mark>yes</mark>
DisturbanceActivity	Disturbance activity	Deliberate human action of either a public disorder nature or of a situation alert type which could disrupt traffic.		no
PublicEvent	Public event	Organised public event which could disrupt traffic.		no

Table 1— Classes of the "Activity" package

A.7.1.2 "Activity" package association roles

There are no defined association roles in the "Activity" package

Class name	Role name	Designation	Definition	Multiplicity	Target
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Table 2— Associations of the "Activity" package

A.7.1.3 "Activity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
DisturbanceActivity	disturbanceActivityTyp e	Disturbance activity type	Includes all situations of a public disorder type or of an alert type, with potential to disrupt traffic.	11	DisturbanceActi vityTypeEnum
PublicEvent	publicEventType	Public event type	Type of public event which could disrupt traffic.	11	PublicEventTyp eEnum

Table 3— Attributes of the "Activity" package

A.7.2 "AlertCMethod2Linear" package

A.7.2.1 "AlertCMethod2Linear" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCMethod2Linear	ALERT-C method2 linear	A linear section along a road between two points, Primary and Secondary, which are pre-defined in an ALERT-C location table. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the Secondary point.		no

Table 4— Classes of the "AlertCMethod2Linear" package

A.7.2.2 "AlertCMethod2Linear" package association roles

There are no defined association roles in the "AlertCMethod2Linear" package.

A.7.2.3 "AlertCMethod2Linear" package attributes

There are no defined attributes in the "AlertCMethod2Linear" package.

A.7.3 "AlertCMethod2Point" package

A.7.3.1 "AlertCMethod2Point" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCMethod2Point	ALERT-C method2 point	A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table and which has an associated direction of traffic flow.		no

Table 5— Classes of the "AlertCMethod2Point" package

A.7.3.2 "AlertCMethod2Point" package association roles

There are no defined association roles in the "AlertCMethod2Point" package.

A.7.3.3 "AlertCMethod2Point" package attributes

There are no defined attributes in the "AlertCMethod2Point" package.

A.7.4 "AlertCMethod4Linear" package

A.7.4.1 "AlertCMethod4Linear" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCMethod4Linear	ALERT-C method4 linear	A linear section along a road between two points, Primary and Secondary, which are pre-defined ALERT-C locations plus offset distance. Direction is FROM the Secondary point TO the Primary point, i.e. the Primary point is downstream of the Secondary point.		<mark>o</mark>

Table 6— Classes of the "AlertCMethod4Linear" package

A.7.4.2 "AlertCMethod4Linear" package association roles

There are no defined association roles in the "AlertCMethod4Linear" package.

A.7.4.3 "AlertCMethod4Linear" package attributes

There are no defined attributes in the "AlertCMethod4Linear" package.

A.7.5 "AlertCMethod4Point" package

A.7.5.1 "AlertCMethod4Point" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCMethod4Point	ALERT-C method4 point	A single point on the road network defined by reference to a point in a pre-defined ALERT-C location table plus an offset distance and which has an associated direction of traffic flow.		no

Table 7— Classes of the "AlertCMethod4Point" package

A.7.5.2 "AlertCMethod4Point" package association roles

There are no defined association roles in the "AlertCMethod4Point" package.

A.7.5.3 "AlertCMethod4Point" package attributes

There are no defined attributes in the "AlertCMethod4Point" package.

A.7.6 "AustriaProfile" package

A.7.6.1 "AustriaProfile" package classes

There are no defined classes in the "AustriaProfile" package.

A.7.6.2 "AustriaProfile" package association roles

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

A.7.6.3 "AustriaProfile" package attributes

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

A.7.7 "Conditions" package

A.7.7.1 "Conditions" package classes

Class name	Designation	Definition	Stereotype	Abstract
Conditions	Conditions	Any conditions which have the potential to degrade normal driving conditions.		no

Table 8— Classes of the "Conditions" package

A.7.7.2 "Conditions" package association roles

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

A.7.7.3 "Conditions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
Conditions	drivingConditionType	Driving condition type	Description of the driving conditions at the specified location.	01	DrivingCondition TypeEnum

Table 9— Attributes of the "Conditions" package

A.7.8 "Exchange" package

A.7.8.1 "Exchange" package classes

Class name	Designation	Definition	Stereotype	Abstract
Exchange	Exchange	Details associated with the management of the exchange between the supplier and the client.		no

Table 10— Classes of the "Exchange" package

A.7.8.2 "Exchange" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
Exchange	supplierIdentification	Supplier identification		11	InternationalIde ntifier

Table 11— Associations of the "Exchange" package

A.7.8.3 "Exchange" package attributes

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

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
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Table 12— Attributes of the "Exchange" package

A.7.9 "GipLinkExtensions" package

A.7.9.1 "GipLinkExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
ExtendedItineraryByIn dexedLocationsForGip Links	Extended itinerary by indexed locations for gip links	Extension for providing an itinerary of gip links		no
ExtendedLinearForGip Link	Extended linear for gip link	An extension for GipLink linear location reference		no
ExtendedPointForGipL ink	Extended point for gip link	An extension for Point to provide GipLink information		no
GipLink GipLink	Gip link	A GIPLink object		no
GipLinkItineraryLocationReference	Gip link itinerary location reference	Contains an arbitrary number of gip links		no
GipLinkLinearLocation Reference	Gip link linear location reference	Contains one or more gip links that are part of a linear location		no
GipLinkPointLocationR eference	Gip link point location reference	Contains one or more Gip links that are part of a point location		no

Table 13— Classes of the "GipLinkExtensions" package

A.7.9.2 "GipLinkExtensions" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
GipLink	linkPercentageFrom	Link percentage from	From offset	11	PercentageDista nceAlongLinear Element
	linkPercentageTo	Link percentage to	To offset	11	PercentageDista nceAlongLinear Element

Table 14— Associations of the "GipLinkExtensions" package

A.7.9.3 "GipLinkExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
GipLink	<mark>linkld</mark>	Link id	Identifier of the GipLink	<mark>11</mark>	String
	referenceDirection	Reference direction	Reference direction	11	GipReferenceDi rectionEnum
GipLinkItineraryLocationReference	name	Name	Name of the provided GIP	01	String
	version	Version	Version of the provided GIP links.	01	String
GipLinkLinearLocation Reference	name	Name	Name of the provided GIP	01	String
	version	Version	Version of the provided GIP links.	01	String
GipLinkPointLocationR eference	name	Name	Name of the provided GIP	01	String
	version	Version	Version of the provided GIP links.	01	String

Table 15— Attributes of the "GipLinkExtensions" package

A.7.10 "GroupOfLocationExtensions" package

A.7.10.1 "GroupOfLocationExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
GroupOfLocationsExte nded	Group of locations extended	Extensions for GroupOfLocations to provide additional information relevant to the AustriaProfile		no
LocationInfo	Location info	Additional details of the location of a traffic message that are not part of the GroupOfLocations		no
RoadInfo	Road info	Information related to the street, e.g., roadNumber, roadName, etc.		no

Table 16— Classes of the "GroupOfLocationExtensions" package

A.7.10.2 "GroupOfLocationExtensions" package association roles

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

A.7.10.3 "GroupOfLocationExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
LocationInfo	country	Country	Country where the event lies. The info is important	11	CountryEnum
			for the exchange of messages with neighboring countries		
			or for the import of messages from neighbouring countries		
	locationName	Location name	Location name if the event location is not on any street. Eg: on a POI.	01	MultilingualStrin g
	locationText	Location text	Free text for the location: eg. A23 Klagenfurt West, St.Veit at the Glan city center.	01	MultilingualStrin g
	region	Region	Specification of the federal state, so that messages can be filtered by region. It can also affect several states.	0*	String
RoadInfo	roadName	Road name	Road name	11	MultilingualStrin g
	roadNumber	Road number	Road number	01	String
	roadOperator	Road operator	Name of the responsible road operator for this road	11	String
	roadSection	Road section	Specification of the road sections	<mark>0*</mark>	String

Table 17— Attributes of the "GroupOfLocationExtensions" package

A.7.11 "GroupOfLocations" package

A.7.11.1 "GroupOfLocations" package classes

Class name	Designation	Definition	Stereotype	Abstract
AffectedCarriagewayA ndLanes	Affected carriageway and lanes	Supplementary positional information which details carriageway and lane locations. Several instances may exist where the element being described extends over more than one carriageway.		no
AlertCDirection	ALERT-C direction	The direction of traffic flow along the road to which the information relates.		no
AlertCLocation	ALERT-C location	Identification of a specific point, linear or area location in an ALERT-C location table.		no
AlertCMethod2Primary PointLocation	ALERT-C method2 primary point location	The point (called Primary point) which is either a single point or at the downstream end of a linear road section. The point is specified by a reference to a point in a pre-defined ALERT-C location table.		no
AlertCMethod2Second aryPointLocation	ALERT-C method2 secondary point location	The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified by a reference to a point in a pre-defined ALERT-C location table.		no
AlertCMethod4Primary PointLocation	ALERT-C method4 primary point location	The point (called Primary point) which is either a single point or at the downstream end of a linear road section. The point is specified by a reference to a point in a pre-defined ALERT-C location table plus a non-negative offset distance.		<mark>oo</mark>
AlertCMethod4Second aryPointLocation	ALERT-C method4 secondary point location	The point (called Secondary point) which is at the upstream end of a linear road section. The point is specified by a reference to a point in a pre-defined Alert-C location table plus a non-negative offset distance.		no
GroupOfLocations	Group of locations	One or more physically separate locations. Multiple locations may be related, as in an itinerary (or route), or may be unrelated. It is not for identifying the same physical location using different Location objects for different referencing systems.		yes
Itinerary	Itinerary	Multiple (i.e. more than one) physically separate locations arranged as an ordered set that defines an itinerary or route.		yes
ItineraryByIndexedLoc ations	Itinerary by indexed locations	Multiple physically separate locations arranged as an ordered set that defines an itinerary or route. The index qualifier indicates the order.		no
Location	Location	The specification of a location either on a network (as a point or a linear location) or as an area. This may be provided in one or more referencing systems.		yes
NetworkLocation	Network location	The specification of a location on a network (as a point or a linear location).		yes

Class name	Designation	Definition	Stereotype	Abstract
OffsetDistance	Offset distance	The non negative offset distance from the ALERT-C referenced point to the actual point.		no
PointCoordinates	Point coordinates	A pair of coordinates defining the geodetic position of a single point using the European Terrestrial Reference System 1989 (ETRS89).		no
SupplementaryPositio nalDescription	Supplementary positional description	A collection of supplementary positional information which improves the precision of the location.		no

Table 18— Classes of the "GroupOfLocations" package

A.7.11.2 "GroupOfLocations" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
ItineraryByIndexedLoc ations	locationContainedInItin erary	Location contained in itinerary	A location contained in an itinerary (i.e. an ordered set of locations defining a route or itinerary).	11	Location
Location	locationForDisplay	Location for display	A location which may be used by clients for visual display on user interfaces.	01	PointCoordinate s

Table 19— Associations of the "GroupOfLocations" package

A.7.11.3 "GroupOfLocations" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
AffectedCarriagewayA ndLanes	carriageway	Carriageway	Indicates the section of carriageway to which the location relates.	11	CarriagewayEnu m
	footpath	Footpath	Indicates whether the pedestrian footpath is the subject or part of the subject of the location. (True = footpath is subject)	01	Boolean
	lane	Lane	Indicates the specific lane to which the location relates.	0*	LaneEnum
	lengthAffected	Length affected	This indicates the length of road measured in metres affected by the associated traffic element.	01	MetresAsFloat
AlertCDirection	alertCDirectionCoded	ALERT-C direction coded	The direction of traffic flow to which the situation, traffic data or information is related. Positive is in the direction of coding of the road.	11	AlertCDirectionE num
	alertCDirectionNamed	ALERT-C direction named	ALERT-C name of a direction e.g. Brussels -> Lille.	01	MultilingualStrin g
	alertCDirectionSense	ALERT-C direction sense	Indicates for circular routes (i.e. valid only for ring roads) the sense in which navigation should be made from the primary location to the secondary location, to avoid ambiguity. TRUE indicates positive RDS direction, i.e. direction of coding of road.	01	Boolean
AlertCLocation	alertCLocationName	ALERT-C location name	Name of ALERT-C location.	01	MultilingualStrin g
	specificLocation	Specific location	Unique code within the ALERT-C location table which identifies the specific point, linear or area location.	11	AlertCLocationC ode
LocationByReference	predefinedLocationRef erence	Predefined location reference	A reference to a versioned predefined location.	11	VersionedRefer ence
OffsetDistance	offsetDistance	Offset distance	The non negative offset distance from the ALERT-C referenced point to the actual point. The ALERT-C locations in the Primary and Secondary locations must always encompass the linear section being specified, thus Offset Distance is towards the other point.	11	MetresAsNonNe gativeInteger

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
PointCoordinates	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).	<mark>11</mark>	Float
SupplementaryPositio nalDescription	locationDescriptor	Location descriptor	Specifies a descriptor which helps to identify the specific location.	<mark>0*</mark>	LocationDescrip torEnum
	IocationPrecision	Location precision	Indicates that the location is given with a precision which is better than the stated value in metres.	01	MetresAsNonNe gativeInteger
	sequentialRampNumb er	Sequential ramp number	The sequential number of an exit/entrance ramp from a given location in a given direction (normally used to indicate a specific exit/entrance in a complex junction/intersection).	01	NonNegativeInt eger

Table 20— Attributes of the "GroupOfLocations" package

A.7.12 "Impact" package

A.7.12.1 "Impact" package classes

Class name	Designation	Definition	Stereotype	Abstract
Delays	Delays	The details of the delays being caused by the situation element defined in the situation record. It is recommended to only use one of the optional attributes to avoid confusion.		no
<mark>Impact</mark>	Impact	An assessment of the impact that an event or operator action defined by the situation record has on the driving conditions.		no

Table 21— Classes of the "Impact" package

A.7.12.2 "Impact" package association roles

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

A.7.12.3 "Impact" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
Delays	delayBand	Delay band	The time band within which the additional travel time due to adverse travel conditions of any kind falls, when compared to "normal conditions".	01	DelayBandEnu m
	delaysType	Delays type	Coarse classification of the delay.	01	DelaysTypeEnu m
	delayTimeValue	Delay time value	The value of the additional travel time due to adverse travel conditions of any kind, when compared to "normal conditions", given in seconds.	01	Seconds
Impact	capacityRemaining	Capacity remaining	The ratio of current capacity to the normal (free flow) road capacity in the defined direction, expressed as a percentage. Capacity is the maximum number of vehicles that can pass a specified point on the road, in unit time given the specified conditions.	01	Percentage
	numberOfLanesRestri cted	Number of lanes restricted	The number of normally usable lanes on the carriageway which are now restricted either fully or partially (this may include the hard shoulder if it is normally available for operational use, e.g. in hard shoulder running schemes).	01	NonNegativeInt eger
	numberOfOperationalL anes	Number of operational lanes	The number of usable lanes in the specified direction which remain fully operational (this may include the hard shoulder if it is being used as an operational lane).	01	NonNegativeInt eger
	originalNumberOfLane s	Original number of lanes	The normal number of usable lanes in the specified direction that the carriageway has before reduction due to roadworks or traffic events.	01	NonNegativeInt eger
	residualRoadWidth	Residual road width	The total width of the combined operational lanes in the specified direction.	01	MetresAsFloat
	trafficConstrictionType	Traffic constriction type	The type of constriction to which traffic is subjected as a result of an event or operator action.	01	TrafficConstricti onTypeEnum

Table 22— Attributes of the "Impact" package

A.7.13 "Linear" package

A.7.13.1 "Linear" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCLinear	ALERT-C linear	A linear section along a road defined between two points on the road by reference to a pre-defined ALERT-C location table.		yes
Linear	Linear	A linear section along a single road with optional directionality defined between two points on the same road.		no

Table 23— Classes of the "Linear" package

A.7.13.2 "Linear" package association roles

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

A.7.13.3 "Linear" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
AlertCLinear	alertCLocationCountry Code	ALERT-C location country code	EBU country code.	11	String
	alertCLocationTableNu mber	ALERT-C location table number	Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location table number.	11	String
	alertCLocationTableVe rsion	ALERT-C location table version	Version number associated with an ALERT-C table reference.	11	String

Table 24— Attributes of the "Linear" package

A.7.14 "LinearByCoordinates" package

A.7.14.1 "LinearByCoordinates" package classes

Class name	Designation	Definition	Stereotype	Abstract
ExtendedLinear	Extended linear	Extension point for linear Locations.		no
LinearByCoordinates	Linear by coordinates	A linear location defined by coordinates.		no

Table 25— Classes of the "LinearByCoordinates" package

A.7.14.2 "LinearByCoordinates" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
LinearByCoordinates	end	End	End point of a LinearByCoordinates	11	PointCoordinate s
	intermediate	Intermediate	Points of a LinearByCoordinates object that are neither start or end point.	11	PointCoordinate s
	start	Start	Start point of a LinearByCoordinates	11	PointCoordinate s

Table 26— Associations of the "LinearByCoordinates" package

A.7.14.3 "LinearByCoordinates" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
LinearByCoordinates	directed	Directed	Whether this linear is directed or not. Default is directed=true	01	Boolean
	roadName	Road name	Name of the road of which the linear element forms a part.	01	MultilingualStrin g
	roadNumber	Road number	Identifier/number of the road of which the linear element forms a part.	01	String

Table 27— Attributes of the "LinearByCoordinates" package

A.7.15 "LinearWithinLinearElement" package

A.7.15.1 "LinearWithinLinearElement" package classes

Class name	Designation	Definition	Stereotype	Abstract
LinearWithinLinearEle ment	Linear within linear element	A linear section along a linear element where the linear element is either a part of or the whole of a linear object (i.e. a road), consistent with ISO 19148 definitions.		no

Table 28— Classes of the "LinearWithinLinearElement" package

A.7.15.2 "LinearWithinLinearElement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
LinearWithinLinearEle ment	fromPoint	From point	A point on the linear element that defines the start node of the linear section.	11	DistanceAlongLi nearElement
	toPoint	To point	A point on the linear element that defines the end node of the linear section.	11	DistanceAlongLi nearElement

Table 29— Associations of the "LinearWithinLinearElement" package

A.7.15.3 "LinearWithinLinearElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
LinearWithinLinearEle ment	administrativeAreaOfLi nearSection	Administrative area of linear section	Identification of the road administration area which contains the specified linear section.	01	MultilingualStrin g
	directionBoundOnLine arSection	Direction bound on linear section	The direction of traffic flow on the linear section in terms of general destination direction.	01	DirectionEnum
	directionRelativeOnLin earSection	Direction relative on linear section	The direction of traffic flow on the linear section relative to the direction in which the linear element is defined.	01	LinearReferenci ngDirectionEnu m
	heightGradeOfLinearS ection	Height grade of linear section	Identification of whether the linear section that is part of the linear element is at, above or below the normal elevation of a linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade" separation.	01	HeightGradeEn um

Table 30— Attributes of the "LinearWithinLinearElement" package

A.7.16 "Management" package

A.7.16.1 "Management" package classes

Class name	Designation	Definition	Stereotype	Abstract
LifeCycleManagement	Life cycle management	Information relating to the life cycle management of the situation record.		no
Management	Management	Information relating to the management of the situation record.		no

Table 31— Classes of the "Management" package

A.7.16.2 "Management" package association roles

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

A.7.16.3 "Management" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
LifeCycleManagement	cancel	Cancel	Indication that all the element information previously sent is not considered valid, due to an incorrect content.	01	Boolean
	end	End	A binary attribute specifying whether the situation element is finished (true) or not (false). If finished (i.e. end is true) then the overallEndTime in the OverallPeriod class associated with the SituationRecord must be populated.	01	Boolean

Table 32— Attributes of the "Management" package

A.7.17 "NetworkManagement" package

A.7.17.1 "NetworkManagement" package classes

Class name	Designation	Definition	Stereotype	Abstract
GeneralInstructionOrM essageToRoadUsers	General instruction or message to road users	General instruction and/or message that is issued by the network/road operator which is applicable to drivers and sometimes passengers.		no
GeneralNetworkMana gement	General network management	Network management action that is instigated either manually or automatically by the network/road operator. Compliance with any resulting control may be advisory or mandatory.		no
NetworkManagement	Network management	Network management action which is applicable to the road network and its users.		yes
ReroutingManagement	Rerouting management	Rerouting management action that is issued by the network/road operator.		no
RoadOrCarriagewayOr LaneManagement	Road or carriageway or lane management	Road, carriageway or lane management action that is instigated by the network/road operator.		no
SpeedManagement	Speed management	Speed management action that is instigated by the network/road operator.		no
WinterDrivingManage ment	Winter driving management	Winter driving management action that is instigated by the network/road operator.		no

Table 33— Classes of the "NetworkManagement" package

A.7.17.2 "NetworkManagement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
NetworkManagement	forVehiclesWithCharac teristicsOf	For vehicles with characteristics of	The characteristics of those vehicles for which the network management is applicable.	<mark>0*</mark>	VehicleCharacte ristics

Table 34— Associations of the "NetworkManagement" package

A.7.17.3 "NetworkManagement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
GeneralInstructionOrM essageToRoadUsers	generalInstructionToR oadUsersType	General instruction to road users type	General instruction that is issued by the network/road operator which is applicable to drivers and sometimes passengers.	01	GeneralInstructi onToRoadUsers TypeEnum
	generalMessageToRo adUsers	General message to road users	General message that is issued by the network/road operator which is applicable to drivers and sometimes passengers, e.g. details about an amber alert (missing or abducted child alert).	01	MultilingualStrin g
GeneralNetworkMana gement	generalNetworkManag ementType	General network management type	The type of traffic management action instigated by the network/road operator.	11	GeneralNetwork ManagementTy peEnum
	trafficManuallyDirected By	Traffic manually directed by	Type of person that is manually directing traffic (applicable if generalNetworkManagementType is set to "trafficBeingManuallyDirected").	01	PersonCategory Enum
NetworkManagement	applicableForTrafficDir ection	Applicable for traffic direction	The ultimate traffic direction to which the network management is applicable.	0*	DirectionEnum
	applicableForTrafficTy pe	Applicable for traffic type	The type of traffic to which the network management is applicable.	0*	TrafficTypeEnu m
	automaticallyInitiated	Automatically initiated	Defines whether the network management is initiated by an automatic system.	01	Boolean
	complianceOption	Compliance option	Defines whether the network management instruction or the control resulting from a network management action is advisory or mandatory.	11	ComplianceOpti onEnum
	placesAtWhichApplica ble	Places at which applicable	Places, in generic terms, at which the network management applies.	0*	PlacesEnum
ReroutingManagement	reroutingItineraryDescr iption	Rerouting itinerary description	A description of the rerouting itinerary.	01	MultilingualStrin g
	reroutingManagement Type	Rerouting management type	Type of rerouting management action instigated by operator.	1*	ReroutingManag ementTypeEnu m
RoadOrCarriagewayOr LaneManagement	minimumCarOccupanc y	Minimum car occupancy	The minimum number of persons required in a vehicle in order for it to be allowed to transit the specified road section.	01	NonNegativeInt eger

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
	roadOrCarriagewayOr LaneManagementTyp e	Road or carriageway or lane management type	Type of road, carriageway or lane management action instigated by operator.	1.1	RoadOrCarriage wayOrLaneMan agementTypeEn um
SpeedManagement	speedManagementTyp e	Speed management type	Type of speed management action instigated by operator.	01	SpeedManagem entTypeEnum
	temporarySpeedLimit	Temporary speed limit	Temporary limit defining the maximum advisory or mandatory speed of vehicles.	01	KilometresPerH our
WinterDrivingManage ment	winterEquipmentMana gementType	Winter equipment management type	Type of winter equipment management action instigated by operator.	11	WinterEquipmen tManagementTy peEnum

Table 35— Attributes of the "NetworkManagement" package

A.7.18 "NonRoadEventInformation" package

A.7.18.1 "NonRoadEventInformation" package classes

Class name	Designation	Definition	Stereotype	Abstract
CarParks	Car parks	Provides information on the status of one or more car parks.		no
NonRoadEventInforma tion	Non road event information	Information about an event which is not on the road, but which may influence the behaviour of drivers and hence the characteristics of the traffic flow.		yes

Table 36— Classes of the "NonRoadEventInformation" package

A.7.18.2 "NonRoadEventInformation" package association roles

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

A.7.18.3 "NonRoadEventInformation" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
CarParks	carParkIdentity	Car park identity	The identity of one or a group of car parks.	<mark>11</mark>	String
	carParkStatus	Car park status	Indicates the status of one or more specified car parks.	01	CarParkStatusE num

Table 37— Attributes of the "NonRoadEventInformation" package

A.7.19 "Obstruction" package

A.7.19.1 "Obstruction" package classes

Class name	Designation	Definition	Stereotype	Abstract
GeneralObstruction	General obstruction	Any stationary or moving obstacle of a physical nature, other than of an animal, vehicle, environmental, or damaged equipment nature.		no
Obstruction	Obstruction	Any stationary or moving obstacle of a physical nature (e.g. obstacles or vehicles from an earlier accident, shed loads on carriageway, rock fall, abnormal or dangerous loads, or animals etc.) which could disrupt or endanger traffic.		yes
VehicleObstruction	Vehicle obstruction	An obstruction on the road caused by one or more vehicles.		no

Table 38— Classes of the "Obstruction" package

A.7.19.2 "Obstruction" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
Obstruction	mobilityOfObstruction	Mobility of obstruction	The mobility of the obstruction.	01	Mobility
VehicleObstruction	obstructingVehicle	Obstructing vehicle	The obstructing vehicle.	0*	Vehicle

Table 39— Associations of the "Obstruction" package

A.7.19.3 "Obstruction" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
GeneralObstruction	obstructionType	Obstruction type	Characterization of the type of general obstruction.	1*	ObstructionType Enum
Obstruction	numberOfObstructions	Number of obstructions	The number of obstructions that are partly or wholly blocking the road.	01	NonNegativeInt eger
VehicleObstruction	vehicleObstructionTyp e	Vehicle obstruction type	Characterization of an obstruction on the road caused by one or more vehicles.	11	VehicleObstructi onTypeEnum

Table 40— Attributes of the "Obstruction" package

A.7.20 "OpenLRExtension" package

A.7.20.1 "OpenLRExtension" package classes

Class name	Designation	Definition	Stereotype	Abstract
OpenIrAreaLocationRe ference	OpenIr area location reference	a two-dimensional part of the surface of the earth which is bounded by a closed		no
		curve. An area location may cover parts of the road network but does not necessarily need to. It is represente according to the OpenLR standard for Area Locations		
OpenIrBaseLocationR eferencePoint	OpenIr base location reference point	Base class used to hold data about a reference point.		yes
OpenIrBasePointLocati on	OpenIr base point location	Holds common data that are used both in OpenIrPointAccessPoint and OpenIrPointAlongLine.		yes
OpenIrCircleLocationR eference	OpenIr circle location reference	the openLR method of areadefinition by providing a center position and a radius		no
OpenIrClosedLineLoca tionReference	OpenIr closed line location reference	the openLR method of areadefinition by providing a closed path (i.e. a circuit) in the road network. The boundary always consists of road segments		no
OpenIrExtendedArea	OpenIr extended area	Extension to provide Area information in openLR format		no
OpenIrExtendedLinear	OpenIr extended linear	Extension class for OpenLR Line location reference		no
OpenIrExtendedPoint	OpenIr extended point	Extension class for OpenLR point.		no
OpenIrGeoCoordinate	OpenIr geo coordinate	A geo-coordinate pair is a position in a map defined by its longitude and latitude coordinate values.		no
OpenIrGridAttributes	OpenIr grid attributes	attributes required for the grid method		no
OpenIrGridLocationRef erence	OpenIr grid location reference	the openLR method of areadefinition by providing repeating rectangles		no
OpenIrLastLocationRef erencePoint	OpenIr last location reference point	The sequence of location reference points is terminated by a last location reference point.		no
OpenIrLineAttributes	OpenIr line attributes	Line attributes are part of a location reference point and consists of functional road class (FRC),form of way (FOW) and bearing (BEAR) data.		no
OpenIrLineLocationRef erence	OpenIr line location reference	A LineLocationReference is defined by an ordered sequence of location reference points and a terminating last location reference point.		no
OpenIrLocationRefere ncePoint	OpenIr location reference point	The basis of a location reference is a sequence of location reference points (LRPs).		no

Class name	Designation	Definition	Stereotype	Abstract
OpenIrOffsets	Openir offsets	Offsets are used to locate the start and end of a location more precisely than bounding to the nodes in a network.		no
OpenIrPathAttributes	OpenIr path attributes	The field path attributes is part of a location reference point (except for the last location reference point) and consists of lowest functional road class (LFRCNP) and distance to next point (DNP) data.		no
OpenIrPointAlongLine	OpenIr point along line	Point along a line		no
OpenIrPointLocationR eference	OpenIr point location reference	A point location is a zero-dimensional element in a map that specifies a geometric location.		no
OpenIrPoiWithAccess Point	OpenIr poi with access point	Point along line with access is a point location which is defined by a line,an offset value and a coordinate.		no
OpenIrPolygonCorners	OpenIr polygon corners	geo-coordinate pairs. The coordinate pairs defining the corners of the underlying geometrical polygon.		no
OpenIrPolygonLocatio nReference	Openir polygon location reference	the openLR method of areadefinition by providing points that bound the area		no
OpenIrRectangle	OpenIr rectangle	two geo-coordinate pairs defining the rectangular		no
OpenIrRectangleLocati onReference	Openir rectangle location reference	the openLR method of areadefinition by providing a rectangular shape defined by two geo-coordinate pairs		no

Table 41— Classes of the "OpenLRExtension" package

A.7.20.2 "OpenLRExtension" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
OpenIrBaseLocationR eferencePoint	openIrCoordinate	OpenIr coordinate		11	PointCoordinate s
OpenIrClosedLineLoca tionReference	openIrLastLine	OpenIr last line		11	OpenIrLineAttrib utes
OpenIrExtendedLinear	firstDirection	First direction	First OpenLR reference in first/main direction.	11	OpenIrLineLocat ionReference
	oppositeDirection	Opposite direction	If both direction, this is tha reference in the opposite direction against firstDirection.	01	OpenIrLineLocat ionReference
OpenIrGeoCoordinate	openIrCoordinate	OpenIr coordinate		11	PointCoordinate s
OpenIrLineLocationRef erence	openIrOffsets	OpenIr offsets		01	OpenIrOffsets
OpenIrPoiWithAccess Point	openIrCoordinate	OpenIr coordinate	The coordinate of the actual point of interest	11	PointCoordinate s
OpenIrPolygonCorners	openIrCoordinate	OpenIr coordinate		3*	PointCoordinate s
OpenIrRectangle	openIrLowerLeft	Openir lower left	The lower left corner of the rectangle	11	PointCoordinate s
	openIrUpperRight	OpenIr upper right	the upper right corner of the rectangle	11	PointCoordinate s

Table 42— Associations of the "OpenLRExtension" package

A.7.20.3 "OpenLRExtension" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
OpenIrBasePointLocati on	openIrOrientation	OpenIr orientation	Orientation	11	OpenIrOrientatio nEnum
	openIrPositiveOffset	OpenIr positive offset	The positive offset along the line of the location.	01	MetresAsNonNe gativeInteger
	openIrSideOfRoad	OpenIr side of road	Side of road	11	OpenIrSideOfRo adEnum
OpenIrCircleLocationR eference	radius	Radius	The radius of the geometric area identified.	11	MetresAsNonNe gativeInteger
OpenIrGridAttributes	openIrNumColumns	OpenIr num columns	the number that the base rectangle should be multiplied in the east direction	11	NonNegativeInt eger
	openIrNumRows	OpenIr num rows	the number that the base rectangle should be multiplied in the north direction	11	NonNegativeInt eger
OpenIrLineAttributes	openIrBearing	OpenIr bearing	defines the bearing field as an integer value between 0 and 360 whereby "0" is included and "360" is excluded from that range.	11	AngleInDegrees
	openIrFormOfWay	OpenIr form of way	The form of way (FOW) can hold eight different values as described in the logical format.	11	OpenIrFormOfW ayEnum
	openIrFunctionalRoad Class	OpenIr functional road class	The functional road class (FRC) can hold eight different values as described in the logical format.	11	OpenIrFunctiona IRoadClassEnu m
OpenIrOffsets	openIrNegativeOffset	OpenIr negative offset	The negative offset along the line of the location.	01	MetresAsNonNe gativeInteger
	openIrPositiveOffset	OpenIr positive offset	The positive offset along the line of the location.	01	MetresAsNonNe gativeInteger
OpenIrPathAttributes	openIrDistanceToNext LRPoint	OpenIr distance to next I r point	The DNP attribute measures the distance in meters between two consecutive LR-points along the location reference path as described in the logical format.	11	NonNegativeInt eger
	openIrLowestFRCToN extLRPoint	OpenIr lowest f r c to next I r point	The lowest FRC to the next point indicates the lowest functional road class used in the location reference path to the next LR-point.	11	OpenIrFunctiona IRoadClassEnu m

Table 43— Attributes of the "OpenLRExtension" package

A.7.21 "OperatorAction" package

A.7.21.1 "OperatorAction" package classes

Class name	Designation	Definition	Stereotype	Abstract
OperatorAction	Operator action	Actions that a traffic operator can decide to implement to prevent or help correct dangerous or poor driving conditions, including maintenance of the road infrastructure.		no

Table 44— Classes of the "OperatorAction" package

A.7.21.2 "OperatorAction" package association roles

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

A.7.21.3 "OperatorAction" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
OperatorAction	actionOrigin	Action origin	Indicates whether the actions to be undertaken by the operator are the result of an internal operation or external influence.	01	OperatorAction OriginEnum
	actionPlanIdentifier	Action plan identifier	The identifier of the traffic management action plan to which this action relates.	01	String
	operatorActionStatus	Operator action status	The status of the defined operator action.	01	OperatorActionS tatusEnum

Table 45— Attributes of the "OperatorAction" package

A.7.22 "OperatorActionExtension" package

A.7.22.1 "OperatorActionExtension" package classes

Class name	Designation	Definition	Stereotype	Abstract
OperatorActionExtend ed	Operator action extended	Extension class for OperatorAction.		no

Table 46— Classes of the "OperatorActionExtension" package

A.7.22.2 "OperatorActionExtension" package association roles

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

A.7.22.3 "OperatorActionExtension" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
OperatorActionExtend ed	mainSpeedLimit	Main speed limit	The speed limit that covers the longest distance within the road works zone (i.e. there might be higher as well as lower speed limits in this roadworks zone, but for lower distances).	11	KilometresPerH our
	minimumSpeedLimit	Minimum speed limit	The minimum speed limit within the roadworks zone (i.e. there might be segments with a higher speed limit).	01	KilometresPerH our

Table 47— Attributes of the "OperatorActionExtension" package

A.7.23 "PayloadPublication" package

A.7.23.1 "PayloadPublication" package classes

Class name	Designation	Definition	Stereotype	Abstract
PayloadPublication	Payload publication	A payload publication of traffic related information or associated management information created at a specific point in time that can be exchanged via a DATEX II interface.		<mark>yes</mark>

Table 48— Classes of the "PayloadPublication" package

A.7.23.2 "PayloadPublication" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
PayloadPublication	publicationCreator	Publication creator		11	InternationalIde ntifier

Table 49— Associations of the "PayloadPublication" package

A.7.23.3 "PayloadPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
PayloadPublication	defaultLanguage	Default language	The default language used throughout the payload publication.	11	Language
	feedDescription	Feed description	A description of the information which is to be found in the publications originating from the particular feed (URL).	01	MultilingualStrin g
	feedType	Feed type	A classification of the information which is to be found in the publications originating from the particular feed.	01	String
	publicationTime	Publication time	Date/time at which the payload publication was created.	11	DateTime

Table 50— Attributes of the "PayloadPublication" package

A.7.24 "PayloadPublicationExtensions" package

A.7.24.1 "PayloadPublicationExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
LanguageInfo	Language info	Language information		no
PayloadPublicationExt ended	Payload publication extended	Contains extensions related to payload publication. Usually data common to all the derviced classes like SituationPublication, VmsPublication, etc., are to be added.		no

Table 51— Classes of the "PayloadPublicationExtensions" package

A.7.24.2 "PayloadPublicationExtensions" package association roles

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

A.7.24.3 "PayloadPublicationExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
LanguageInfo	mainLanguage	Main language	Specifies the language in which the message is created	11	<u>Language</u>
	translation	Translation	Specification of the language used during translation. Multiple translations are possible.	<mark>0*</mark>	Language

Table 52— Attributes of the "PayloadPublicationExtensions" package

A.7.25 "Point" package

A.7.25.1 "Point" package classes

Class name	Designation	Definition	Stereotype	Abstract
AlertCPoint	ALERT-C point	A single point on the road network defined by reference to a pre- defined ALERT-C location table and which has an associated direction of traffic flow.		<mark>yes</mark>
Point	Point	A single geospatial point.		no
PointByCoordinates	Point by coordinates	A single point defined only by a coordinate set with an optional bearing direction.		no

Table 53— Classes of the "Point" package

A.7.25.2 "Point" package association roles

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

A.7.25.3 "Point" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
AlertCPoint	alertCLocationCountry Code	ALERT-C location country code	EBU country code.	<mark>11</mark>	String
	alertCLocationTableNu mber	ALERT-C location table number	Number allocated to an ALERT-C table in a country. Ref. EN ISO 14819-3 for the allocation of a location table number.	11	String
	alertCLocationTableVe rsion	ALERT-C location table version	Version number associated with an ALERT-C table reference.	11	String
PointByCoordinates	bearing	Bearing	A bearing at the point measured in degrees (0 - 359). Unless otherwise specified the reference direction corresponding to 0 degrees is North.	01	NonNegativeInt eger

Table 54— Attributes of the "Point" package

A.7.26 "PointAlongLinearElement" package

A.7.26.1 "PointAlongLinearElement" package classes

Class name	Designation	Definition	Stereotype	Abstract
DistanceAlongLinearEl ement	Distance along linear element	Distance of a point along a linear element either measured from the start node or a defined referent on that linear element, where the start node is relative to the element definition rather than the direction of traffic flow.		yes
DistanceFromLinearEl ementReferent	Distance from linear element referent	Distance of a point along a linear element measured from a "from referent" on the linear element, in the sense relative to the linear element definition rather than the direction of traffic flow or optionally towards a "towards referent".		no
DistanceFromLinearEl ementStart	Distance from linear element start	Distance of a point along a linear element measured from the start node of the linear element, where start node is relative to the element definition rather than the direction of traffic flow.		no
LinearElement	Linear element	A linear element along a single linear object, consistent with ISO 19148 definitions.		no
LinearElementByPoint s	Linear element by points	A linear element along a single linear object defined by its start and end points.		O
PercentageDistanceAl ongLinearElement	Percentage distance along linear element	Distance of a point along a linear element measured from the start node expressed as a percentage of the whole length of the linear element, where start node is relative to the element definition rather than the direction of traffic flow.		no
PointAlongLinearElem ent	Point along linear element	A point on a linear element where the linear element is either a part of or the whole of a linear object (i.e. a road), consistent with ISO 19148 definitions.		no
Referent	Referent	A referent on a linear object that has a known location such as a node, a reference marker (e.g. a markerpost), an intersection etc.		no

Table 55— Classes of the "PointAlongLinearElement" package

A.7.26.2 "PointAlongLinearElement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
DistanceFromLinearEl ementReferent	fromReferent	From referent	A known location along the linear element from which the distanceAlong is measured, termed the "fromReferent" in ISO 19148.	11	Referent
	towardsReferent	Towards referent	A known location along the linear element towards which the distanceAlong is measured, termed the "towardsReferent" in ISO 19148.	01	Referent
LinearElementByPoint s	endPointOfLinearElem ent	End point of linear element	The referent at a known location on the linear object which defines the end of the linear element.	11	Referent
	intermediatePointOnLi nearElement	Intermediate point on linear element	A referent at a known location on the linear object which is neither the start or end of the linear element.	<mark>0*</mark>	Referent
	startPointOfLinearEle ment	Start point of linear element	The referent at a known location on the linear object which defines the start of the linear element.	11	Referent

Table 566— Associations of the "PointAlongLinearElement" package

A.7.26.3 "PointAlongLinearElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
DistanceFromLinearEl ementStart	distanceAlong	Distance along	A measure of distance along a linear element.	11	MetresAsFloat
DistanceFromLinearEl ementStart	distanceAlong	Distance along	A measure of distance along a linear element.	11	MetresAsFloat
LinearElement	linearElementNature	Linear element nature	An indication of the nature of the linear element.	01	LinearElementN atureEnum
	linearElementReferenc eModel	Linear element reference model	The identifier of a road network reference model which segments the road network according to specific business rules.	01	String
	linearElementReference eModelVersion	Linear element reference model version	The version of the identified road network reference model.	01	String
	roadName	Road name	Name of the road of which the linear element forms a part.	01	MultilingualStrin g
	roadNumber	Road number	Identifier/number of the road of which the linear element forms a part.	01	String
PercentageDistanceAl ongLinearElement	percentageDistanceAl ong	Percentage distance along	A measure of distance along a linear element from the start of the element expressed as a percentage of the total length of the linear object.	11	Percentage
PointAlongLinearElem ent	administrativeAreaOfP oint	Administrative area of point	Identification of the road administration area which contains the specified point.	01	MultilingualStrin g
	directionBoundAtPoint	Direction bound at point	The direction of traffic flow at the specified point in terms of general destination direction.	01	DirectionEnum
	directionRelativeAtPoi nt	Direction relative at point	The direction of traffic flow at the specified point relative to the direction in which the linear element is defined.	01	LinearReferenci ngDirectionEnu m
	heightGradeOfPoint	Height grade of point	Identification of whether the point on the linear element is at, above or below the normal elevation of a linear element of that type (e.g. road or road section) at that location, typically used to indicate "grade" separation.	01	HeightGradeEn um

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
Referent	referentDescription	Referent description	Description of the referent.	01	MultilingualStrin g
	referentIdentifier	Referent identifier	The identifier of the referent, unique on the specified linear element (i.e. road or part of).	1.1	String
	referentName	Referent name	The name of the referent, e.g. a junction or intersection name.	01	String
	referentType	Referent type	The type of the referent.	11	ReferentTypeEn um

Table 57— Attributes of the "PointAlongLinearElement" package

A.7.27 "ReusableClasses" package

A.7.27.1 "ReusableClasses" package classes

Class name	Designation	Definition	Stereotype	Abstract
HeaderInformation	Header information	Management information relating to the data contained within a publication.		no
InternationalIdentifier	International identifier	An identifier/name whose range is specific to the particular country.		<mark>no</mark>
Mobility	Mobility	An indication of whether the associated instance of a SituationRecord is mobile (e.g. a march or parade moving along a road) or stationary.		no
Source	Source	Details of the source from which the information was obtained.		no
UrlLink	URL link	Details of a Uniform Resource Locator (URL) address pointing to a resource available on the Internet from where further relevant information may be obtained.		no

Table 58— Classes of the "ReusableClasses" package

A.7.27.2 "ReusableClasses" package association roles

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

A.7.27.3 "ReusableClasses" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
HeaderInformation	areaOfInterest	Area of interest	The extent of the geographic area to which the related information should be distributed.	01	AreaOfInterestE num
	confidentiality	Confidentiality	The extent to which the related information may be circulated, according to the recipient type. Recipients must comply with this confidentiality statement.	1.1	ConfidentialityV alueEnum
	informationStatus	Information status	The status of the related information (real, test, exercise).	11	InformationStatu sEnum
	urgency	Urgency	This indicates the urgency with which a message recipient or Client should distribute the enclosed information. Urgency particularly relates to functions within RDS-TMC applications.	01	UrgencyEnum
InternationalIdentifier	country	Country	ISO 3166-1 two character country code.	11	CountryEnum
	nationalldentifier	National identifier	Identifier or name unique within the specified country.	11	String
Mobility	mobilityType	Mobility type	An indication of whether the associated instance of a SituationRecord is mobile (e.g. a march or parade moving along a road) or stationary.	11	MobilityEnum
Source	reliable	Reliable	An indication as to whether the source deems the associated information to be reliable/correct. "True" indicates it is deemed reliable.	01	Boolean
	sourceCountry	Source country	ISO 3166-1 two character country code of the source of the information.	01	CountryEnum
	sourceldentification	Source identification	Identifier of the organisation or the traffic equipment which has produced the information relating to this version of the information.	01	String
	sourceName	Source name	The name of the organisation which has produced the information relating to this version of the information.	01	MultilingualStrin g

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
	sourceType	Source type	Information about the technology used for measuring the data or the method used for obtaining qualitative descriptions relating to this version of the information.	01	SourceTypeEnu m
UrlLink	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.	11	Url
	urlLinkDescription	URL link description	Description of the relevant information available on the Internet from the URL link.	01	MultilingualStrin g
	urlLinkType	URL link type	Details of the type of relevant information available on the Internet from the URL link.	01	UrlLinkTypeEnu m

Table 59— Attributes of the "ReusableClasses" package

A.7.28 "SafetyRelatedMessages" package

A.7.28.1 "SafetyRelatedMessages" package classes

Class name	Designation	Definition	Stereotype	Abstract
SituationRecordExtend edApproved	Situation record extended approved	Extension class for SituationRecord.		no

Table 60— Classes of the "SafetyRelatedMessages" package

A.7.28.2 "SafetyRelatedMessages" package association roles

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

A.7.28.3 "SafetyRelatedMessages" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
SituationRecordExtend edApproved	safetyRelatedMessage	Safety related message	Indicates, whether this SituationRecord specifies a safety related message according to Commission Delegated Regulation (EU) No 886/2013.	01	Boolean

Table 61— Attributes of the "SafetyRelatedMessages" package

A.7.29 "SituationExtensions" package

A.7.29.1 "SituationExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
SituationExtended	Situation extended	Extension for situation		no

Table 62— Classes of the "SituationExtensions" package

A.7.29.2 "SituationExtensions" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
SituationExtended	overallPhaseSituation	Overall phase situation	One identifiable versioned instance of a single record within a situation that summarises a single phase (i.e overall location, validity information of a single phase).	0*	SituationRecord
	overallSituation	Overall situation	One identifiable versioned instance of a single record/element within a situation that summarises all other records in the situation (i.e. superset of all locations, superset of their validity information etc.).	11	SituationRecord

Table 63— Associations of the "SituationExtensions" package

A.7.29.3 "SituationExtensions" package attributes

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

A.7.30 "SituationPublication" package

A.7.30.1 "SituationPublication" package classes

Class name	Designation	Definition	Stereotype	Abstract
Situation	Situation	An identifiable instance of a traffic/travel situation comprising one or more traffic/travel circumstances which are linked by one or more causal relationships. Each traffic/travel circumstance is represented by a Situation Record.	versionedIdentifiabl e	no
SituationPublication	Situation publication	A publication containing zero or more traffic/travel situations.		no

Table 64— Classes of the "SituationPublication" package

A.7.30.2 "SituationPublication" package association roles

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

A.7.30.3 "SituationPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
Situation	overallSeverity	Overall severity	The overall assessment of the impact (in terms of severity) that the situation as a whole is having, or will have, on the traffic flow as perceived by the supplier.	01	SeverityEnum
	relatedSituation	Related situation	A reference to a related situation via its unique identifier.	0*	VersionedRefer ence
	situationVersionTime	Situation version time	The date/time that this current version of the Situation was written into the database of the supplier which is involved in the data exchange. Identity and version of the situation are defined by the class stereotype implementation.	01	DateTime

Table 65— Attributes of the "SituationPublication" package

A.7.31 "SituationRecord" package

A.7.31.1 "SituationRecord" package classes

Class name	Designation	Definition	Stereotype	Abstract
Cause	Cause	Contains details of the cause of a record within a situation		yes
Comment	Comment	A free text comment with an optional date/time stamp that can be used by the operator to convey un-coded observations/information.		no
ManagedCause	Managed cause	A cause of this situation record which is managed by the publication creator, i.e. one which is represented by another situation record produced by the same publication creator.		no
NonManagedCause	Non managed cause	A cause of this situation record which is not managed by the publication creator, i.e. one which is not represented by another situation record produced by the same publication creator.		no
SituationRecord	Situation record	An identifiable versioned instance of a single record/element within a situation.	versionedIdentifiabl e	yes

Table 66— Classes of the "SituationRecord" package

A.7.31.2 "SituationRecord" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
SituationRecord	generalPublicCommen t	General public comment	A comment which may be freely distributed to the general public	<mark>0*</mark>	Comment
	nonGeneralPublicCom ment	Non general public comment	A comment which should not be distributed to the general public.	0*	Comment

Table 67— Associations of the "SituationRecord" package

A.7.31.3 "SituationRecord" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
Comment	comment	Comment	A free text comment that can be used by the operator to convey un-coded observations/information.	11	MultilingualStrin g
	commentDateTime	Comment date time	The date/time at which the comment was made.	01	DateTime
	commentType	Comment type	A classification of the the type of comment.	01	CommentTypeE num
ManagedCause	managedCause	Managed cause	A reference to another situation record produced by the same publication creator which defines a cause of the event defined here.	01	VersionedRefer ence
NonManagedCause	causeDescription	Cause description	Description of a cause which is not managed by the publication creator (e.g. an off network cause).	01	MultilingualStrin g
	causeType	Cause type	Indicates an external influence that may be the causation of components of a situation.	01	CauseTypeEnu m
SituationRecord	confidentialityOverride	Confidentiality override	The extent to which the related information may be circulated, according to the recipient type. Recipients must comply with this confidentiality statement. This overrides any confidentiality defined for the situation as a whole in the header information.	01	ConfidentialityV alueEnum
	probabilityOfOccurrenc e	Probability of occurrence	An assessment of the degree of likelihood that the reported event will occur.	11	ProbabilityOfOc currenceEnum
	severity	Severity	The assessment of the impact (in terms of severity) that this element of the situation is having, or will have, on the traffic flow as perceived by the supplier.	01	SeverityEnum
	situationRecordCreatio nReference	Situation record creation reference	A unique alphanumeric reference (either an external reference or GUID) of the SituationRecord object (the first version of the record) that was created by the original supplier.	01	String
	situationRecordCreatio nTime	Situation record creation time	The date/time that the SituationRecord object (the first version of the record) was created by the original supplier.	11	DateTime

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
	situationRecordCreatio nTime	Situation record creation time	The date/time that the SituationRecord object (the first version of the record) was created by the original supplier.	11	DateTime
	situationRecordFirstSu pplierVersionTime	Situation record first supplier version time	The date/time that the current version of the Situation Record was written into the database of the original supplier in the supply chain.	01	DateTime
	situationRecordObserv ationTime	Situation record observation time	The date/time that the information represented by the current version of the SituationRecord was observed by the original (potentially external) source of the information.	01	DateTime
	situationRecordVersio nTime	Situation record version time	The date/time that this current version of the SituationRecord within the situation was written into the database of the supplier which is involved in the data exchange. Identity and version of record are defined by the class stereotype implementation.	11	DateTime

Table 68— Attributes of the "SituationRecord" package

A.7.32 "SituationRecordExtensions" package

A.7.32.1 "SituationRecordExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
AffectedModesOfTran sport	Affected modes of transport	Affected modes of transport or types of vehicles by the specified event		no
SituationRecordExtend ed	Situation record extended	Situation record extensions relevant to AustriaProfile		no

Table 69— Classes of the "SituationRecordExtensions" package

A.7.32.2 "SituationRecordExtensions" package association roles

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

A.7.32.3 "SituationRecordExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
AffectedModesOfTran sport	affectedMode	Affected mode	Affected mode of transportation by the event	1*	ExtendedVehicl eTypeEnum
SituationRecordExtend ed	phaseReferenceId	Phase reference id	A reference to a situation record that represents a roadwork phase	01	VersionedRefer ence

Table 70— Attributes of the "SituationRecordExtensions" package

A.7.33 "TimePeriodOfDay" package

A.7.33.1 "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.		<mark>yes</mark>

Table 71— Classes of the "TimePeriodOfDay" package

A.7.33.2 "TimePeriodOfDay" package association roles

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

A.7.33.3 "TimePeriodOfDay" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
TimePeriodByHour	endTimeOfPeriod	End time of period	End of time period.	<mark>11</mark>	Time
	startTimeOfPeriod	Start time of period	Start of time period.	<mark>11</mark>	Time

Table 72— Attributes of the "TimePeriodOfDay" package

A.7.34 "TrafficElement" package

A.7.34.1 "TrafficElement" package classes

Class name	Designation	Definition	Stereotype	Abstract
AbnormalTraffic	Abnormal traffic	A traffic condition which is not normal.		no
TrafficElement	Traffic element	An event which is not planned by the traffic operator, which is affecting, or has the potential to affect traffic flow.		yes

Table 73— Classes of the "TrafficElement" package

A.7.34.2 "TrafficElement" package association roles

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

A.7.34.3 "TrafficElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
AbnormalTraffic	abnormalTrafficType	Abnormal traffic type	A characterization of the nature of abnormal traffic flow, i.e. specifically relating to the nature of the traffic movement.	01	AbnormalTraffic TypeEnum
	queueLength	Queue length	The length of a queue or the average length of queues in separate lanes due to a situation.	01	MetresAsNonNe gativeInteger

Table 74— Attributes of the "TrafficElement" package

A.7.35 "Validity" package

A.7.35.1 "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 75— Classes of the "Validity" package

A.7.35.2 "Validity" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
OverallPeriod	exceptionPeriod	Exception period	A single time period, a recurring time period or a set of different recurring time periods during which validity is false.	0*	Period
	validPeriod	Valid period	A single time period, a recurring time period or a set of different recurring time periods during which validity is true.	<mark>0*</mark>	Period
Period	recurringDayWeekMon thPeriod	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
	recurringTimePeriodOf Day	Recurring time period of day	A recurring period of a day.	0*	TimePeriodOfD ay
Validity	validityTimeSpecificati on	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).	11	OverallPeriod

Table 76— Associations of the "Validity" package

A.7.35.3 "Validity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
DayWeekMonth	applicableDay	Applicable day	Applicable day of the week. "All days of the week" is expressed by non-inclusion of this attribute.	07	DayEnum
	applicableMonth	Applicable month	Applicable month of the year. "All months of the year" is expressed by non-inclusion of this attribute.	012	MonthOfYearEn um
	applicableWeek	Applicable week	Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this attribute.	05	WeekOfMonthE num
OverallPeriod	overallEndTime	Overall end time	End of bounding period of validity defined by date and time.	01	DateTime
	overallStartTime	Overall start time	Start of bounding period of validity defined by date and time.	<mark>11</mark>	DateTime
Period	endOfPeriod	End of period	End of a period.	01	DateTime
	periodName	Period name	The name of the period.	01	MultilingualStrin g
	startOfPeriod	Start of period	Start of period.	01	DateTime
Validity	overrunning	Overrunning	The activity or action described by the SituationRecord is still in progress, overrunning its planned duration as indicated in a previous version of this record.	01	Boolean
	validityStatus	Validity status	Specification of validity, either explicitly overriding the validity time specification or confirming it.	11	ValidityStatusEn um

Table 77— Attributes of the "Validity" package

A.7.36 "VehicleCharacteristics" package

A.7.36.1 "VehicleCharacteristics" package classes

Class name	Designation	Definition	Stereotype	Abstract
GrossWeightCharacter istic	Gross weight characteristic	Gross weight characteristic of a vehicle.		no
HeightCharacteristic	Height characteristic	Height characteristic of a vehicle.		no
LengthCharacteristic	Length characteristic	Length characteristic of a vehicle.		no
VehicleCharacteristics	Vehicle characteristics	The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes.		no
WidthCharacteristic	Width characteristic	Width characteristic of a vehicle.		no

Table 78— Classes of the "VehicleCharacteristics" package

A.7.36.2 "VehicleCharacteristics" package association roles

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

A.7.36.3 "VehicleCharacteristics" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Туре
GrossWeightCharacter istic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	11	ComparisonOpe ratorEnum
	grossVehicleWeight	Gross vehicle weight	The gross weight of the vehicle and its load, including any trailers.	11	Tonnes
HeightCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	11	ComparisonOpe ratorEnum
	vehicleHeight	Vehicle height	The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in metres.	11	MetresAsFloat
LengthCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	11	ComparisonOpe ratorEnum
	vehicleLength	Vehicle length	The overall distance between the front and back of an individual vehicle, including the length of any trailers, couplings, etc.	11	MetresAsFloat
VehicleCharacteristics	vehicleType	Vehicle type	Vehicle type.	0*	VehicleTypeEnu m
WidthCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	11	ComparisonOpe ratorEnum
	vehicleWidth	Vehicle width	The maximum width of an individual vehicle, in metres.	11	MetresAsFloat

Table 79— Attributes of the "VehicleCharacteristics" package

A.8 Data Dictionary of <<datatypes>> for "AustrianPlannedEventsProfile"

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

A.8.1 The <<datatype>> "AlertCLocationCode"

A positive integer number (between 1 and 63,487) which uniquely identifies a pre-defined Alert C location defined within an Alert-C table.

A.8.2 The <<datatype>> "AngleInDegrees"

An integer number representing an angle in whole degrees between 0 and 359.

A.8.3 The <<datatype>> "KilometresPerHour"

A measure of speed defined in kilometres per hour.

A.8.4 The <<datatype>> "MetresAsFloat"

A measure of distance defined in metres in a floating point format.

A.8.5 The <<datatype>> "MetresAsNonNegativeInteger"

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

A.8.6 The <<datatype>> "Percentage"

A measure of percentage.

A.8.7 The <<datatype>> "Seconds"

Seconds.

A.8.8 The <<datatype>> "Tonnes"

A measure of weight defined in metric tonnes.

A.8.9 The <<datatype>> "VehiclesPerHour"

Vehicles per hour.

A.9 Data Dictionary of <<enumerations>> for "AustrianPlannedEventsProfile"

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

A.9.1 The <<enumeration>> "AbnormalTrafficTypeEnum"

Collection of descriptive terms for abnormal traffic conditions specifically relating to the nature of the traffic movement.

Enumerated value name	Designation	Definition
heavyTraffic	Heavy traffic	Traffic is heavy at the specified location (i.e. average speed is between 75% and 90% of its free-flow level).
other	Other	Other than as defined in this enumeration.
queuingTraffic	Queuing traffic	Traffic is queuing at the specified location, although there is still some traffic movement (i.e. average speed is between 10% and 25% of its free-flow level).
slowTraffic	Slow traffic	Traffic is slow moving at the specified location, but not yet forming queues (i.e. average speed is between 25% and 75% of its free-flow level).
stationaryTraffic	Stationary traffic	Traffic is stationary, or very near stationary, at the specified location (i.e. average speed is less than 10% of its free-flow level).
unspecifiedAbnormalTraffic	Unspecified abnormal traffic	There are abnormal traffic conditions of an unspecified nature at the specified location.

Table 80— Values contained in the enumeration "AbnormalTrafficTypeEnum"

A.9.2 The <<enumeration>> "AlertCDirectionEnum"

The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive (resp. negative) direction corresponds to the positive offset direction within the RDS location table.

Enumerated value name	Designation	Definition
both	Both	Indicates that both directions of traffic flow are affected by the situation or relate to the traffic data.
negative	Negative	The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the negative direction corresponds to the negative offset direction within the RDS location table.
positive	Positive	The direction of traffic flow concerned by a situation or traffic data. In ALERT-C the positive direction corresponds to the positive offset direction within the RDS location table.
unknown	Unknown	Unknown direction.

Table 81— Values contained in the enumeration "AlertCDirectionEnum"

A.9.3 The <<enumeration>> "AreaOfInterestEnum"

Types of areas of interest.

Enumerated value name	Designation	Definition
continentWide	Continent wide	Area of the whole European continent.
national	National	Whole area of the specific country.
neighbouringCountries	Neighbouring countries	Area of countries which are neighbouring the one specified.
notSpecified	Not specified	Non specified area.
regional	Regional	Area of the local region.

Table 81— Values contained in the enumeration "AreaOfInterestEnum"

A.9.4 The <<enumeration>> "CarParkStatusEnum"

Collection of statuses which may be associated with car parks.

Enumerated value name	Designation	Definition
allCarParksFull	All car parks full	All car parks are full within a specified area.
carParkClosed	Car park closed	The specified car park is closed.
carParkFacilityFaulty	Car park facility faulty	The specified car parking facility is not operating normally.
carParkFull	Car park full	A specified car park is completely occupied.
carParkStatusUnknown	Car park status unknown	The status of the specified car park(s) is unknown.
enoughSpacesAvailable	Enough spaces available	Specified car parks have car-parking spaces available.
multiStoryCarParksFull	Multi story car parks full	Multi level car parks are fully occupied.
noMoreParkingSpacesAvailable	No more parking spaces available	Specified car parks are fully occupied.
noParkAndRideInformation	No park and ride information	No park and ride information will be available until the specified time.
noParkingAllowed	No parking allowed	No parking allowed until the specified time.
noParkingInformationAvailable	No parking information available	Car-parking information is not available until a specified time.
normalParkingRestrictionsLifted	Normal parking restrictions lifted	The parking restrictions that normally apply in the specified location have been temporarily lifted.
onlyAFewSpacesAvailable	Only a few spaces available	Specified car parks have 95% or greater occupancy.
parkAndRideServiceNotOperating	Park and ride service not operating	Park and ride services are not operating until the specified time.
parkAndRideServiceOperating	Park and ride service operating	Park and ride services are operating until the specified time.
specialParkingRestrictionsInForce	Special parking restrictions in force	Parking restrictions, other than those that normally apply, are in force in a specified area.

Table 822— Values contained in the enumeration "CarParkStatusEnum"

A.9.5 The <<enumeration>> "CarriagewayEnum"

List of descriptors identifying specific carriageway details.

Enumerated value name	Designation	Definition
connectingCarriageway	Connecting carriageway	On the connecting carriageway.
entrySlipRoad	Entry slip road	On the entry slip road.
exitSlipRoad	Exit slip road	On the exit slip road.
flyover	Flyover	On the flyover, i.e. the section of road passing over another.
leftHandFeederRoad	Left hand feeder road	On the left hand feeder road.
leftHandParallelCarriageway	Left hand parallel carriageway	On the left hand parallel carriageway.
mainCarriageway	Main carriageway	On the main carriageway.
oppositeCarriageway	Opposite carriageway	On the opposite carriageway.
parallelCarriageway	Parallel carriageway	On the adjacent parallel carriageway.
rightHandFeederRoad	Right hand feeder road	On the right hand feeder road.
rightHandParallelCarriageway	Right hand parallel carriageway	On the right hand parallel carriageway.
roundabout	Roundabout	On the roundabout.
serviceRoad	Service road	On the adjacent service road.
slipRoads	Slip roads	On the slip roads.
underpass	Underpass	On the underpass, i.e. the section of road passing under another.

Table 83— Values contained in the enumeration "CarriagewayEnum"

A.9.6 The <<enumeration>> "CommentTypeEnum"

Classification of comment types.

Enumerated value name	Designation	Definition
abnormalLoadMovementNote	Abnormal load movement note	A free text human oriented note describing details of abnormal load movements associated with the SituationRecord.
dataProcessingNote	Data processing note	A free text human oriented note describing the way the information in the SituationRecord has been or should be processed.
description	Description	A free text human oriented description of the situation element defined by the SituationRecord.
internalNote	Internal note	A free text human oriented note that supports internal traffic control operations relating to the situation element defined by the SituationRecord.
locationDescriptor	Location descriptor	A free text human oriented description of the location of the situation element defined by the SituationRecord.
other	Other	Other than as defined in this enumeration.
warning	Warning	A free text human oriented warning relating to the SituationRecord, such as advising the recipient that an advanced warning on VMS should be activated.

Table 84— Values contained in the enumeration "CommentTypeEnum"

A.9.7 The <<enumeration>> "ComparisonOperatorEnum"

Logical comparison operations.

Enumerated value name	Designation	Definition
equalTo	Equal to	Logical comparison operator of "equal to".
greaterThan	Greater than	Logical comparison operator of "greater than".
greaterThanOrEqualTo	Greater than or equal to	Logical comparison operator of "greater than or equal to".
lessThan	Less than	Logical comparison operator of "less than".
lessThanOrEqualTo	Less than or equal to	Logical comparison operator of "less than or equal to".

Table 85— Values contained in the enumeration "ComparisonOperatorEnum"

A.9.8 The <<enumeration>> "ComplianceOptionEnum"

Types of compliance.

Enumerated value name	Designation	Definition
advisory	Advisory	Advisory compliance.
mandatory	Mandatory	Mandatory compliance.

Table 86— Values contained in the enumeration "ComplianceOptionEnum"

A.9.9 The <<enumeration>> "ConfidentialityValueEnum"

Values of confidentiality.

Enumerated value name	Designation	Definition
internalUse	Internal use	For internal use only of the recipient organisation.
noRestriction	No restriction	No restriction on usage.
restrictedToAuthorities	Restricted to authorities	Restricted for use only by authorities.
restrictedToAuthoritiesAndTrafficOp erators	Restricted to authorities and traffic operators	Restricted for use only by authorities and traffic operators.
restrictedToAuthoritiesTrafficOperat orsAndPublishers	Restricted to authorities traffic operators and publishers	Restricted for use only by authorities, traffic operators and publishers (service providers).
restrictedToAuthoritiesTrafficOperat orsAndVms	Restricted to authorities traffic operators and VMS	Restricted for use only by authorities, traffic operators, publishers (service providers) and variable message signs.

Table 87— Values contained in the enumeration "ConfidentialityValueEnum"

A.9.10 The <<enumeration>> "CountryEnum"

List of countries.

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

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 88— Values contained in the enumeration "CountryEnum"

A.9.11 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 89— Values contained in the enumeration "DayEnum"

A.9.12 The <<enumeration>> "DelayBandEnum"

Classifications of a delay banded by length (i.e. the additional travel time).

Enumerated value name	Designation	Definition
betweenOneHourAndThreeHours	Between one hour and three hours	Delay between one hour and three hours.
betweenTenMinutesAndThirtyMinut es	Between ten minutes and thirty minutes	Delay between ten minutes and thirty minutes.
betweenThirtyMinutesAndOneHour	Between thirty minutes and one hour	Delay between thirty minutes and one hour.
betweenThreeHoursAndSixHours	Between three hours and six hours	Delay between three hours and six hours.
longerThanSixHours	Longer than six hours	Delay longer than six hours.
negligible	Negligible	Negligible delay.
upToTenMinutes	Up to ten minutes	Delay up to ten minutes.

Table 90— Values contained in the enumeration "DelayBandEnum"

A.9.13 The <<enumeration>> "DelaysTypeEnum"

Course classifications of a delay.

Enumerated value name	Designation	Definition
delays	Delays	Delays on the road network as a result of any situation which causes hold-ups.
delaysOfUncertainDuration	Delays of uncertain duration	Delays on the road network whose predicted duration cannot be estimated.
longDelays	Long delays	Delays on the road network of unusual severity.
veryLongDelays	Very long delays	Delays on the road network of abnormally unusual severity.

Table 91— Values contained in the enumeration "DelaysTypeEnum"

A.9.14 The <<enumeration>> "DirectionEnum"

List of directions of travel.

Enumerated value name	Designation	Definition
allDirections	All directions	All directions (where more than two are applicable) at this point on the road network.
anticlockwise	Anticlockwise	Anti-clockwise.
bothWays	Both ways	Both directions that are applicable at this point on the road network.
clockwise	Clockwise	Clockwise.
eastBound	East bound	East bound general direction.
inboundTowardsTown	Inbound towards town	Heading towards town centre direction of travel.
innerRing	Inner ring	Inner ring direction.
northBound	North bound	North bound general direction.
northEastBound	North east bound	North east bound general direction.
northWestBound	North west bound	North west bound general direction.
opposite	Opposite	Opposite direction to the normal direction of flow at this point on the road network.
other	Other	Other than as defined in this enumeration.
outboundFromTown	Outbound from town	Heading out of or away from the town centre direction of travel.
outerRing	Outer ring	Outer ring direction.
southBound	South bound	South bound general direction.
southEastBound	South east bound	South east bound general direction.
southWestBound	South west bound	South west bound general direction.
unknown	Unknown	Direction is unknown.
westBound	West bound	West bound general direction.

Table 92— Values contained in the enumeration "DirectionEnum"

A.9.15 The <<enumeration>> "DisturbanceActivityTypeEnum"

Types of disturbance activities.

Enumerated value name	Designation	Definition
airRaid	Air raid	A situation relating to any threat from foreign air power.
altercationOfVehicleOccupants	Altercation of vehicle occupants	An altercation (argument, dispute or fight) between two or more vehicle occupants.
assault	Assault	A situation where an assault has taken place on one or more persons.
assetDestruction	Asset destruction	A situation where assets of one or more persons or authorities have been destroyed.
attack	Attack	A situation where an attack on a group of people or properties has taken place.
attackOnVehicle	Attack on vehicle	A situation where an attack on a vehicle or its occupants has taken place.
blockadeOrBarrier	Blockade or barrier	A manned blockade or barrier across a road stopping vehicles passing.
bombAlert	Bomb alert	An alert to a situation where suspected or actual explosive or incendiary devices may cause disruption to traffic.
crowd	Crowd	A major gathering of people that could disrupt traffic.
demonstration	Demonstration	A public protest with the potential to disrupt traffic.
evacuation	Evacuation	A situation where a definite area is being cleared due to dangerous conditions or for security reasons.
filterBlockade	Filter blockade	A manned blockade of a road where only certain vehicles are allowed through.
goSlowOperation	Go slow operation	As a form of protest, several vehicles are driving in a convoy at a low speed which is affecting the normal traffic flow.
gunfireOnRoadway	Gunfire on roadway	A situation involving gunfire, perceived or actual, on or near the roadway through an act of terrorism or crime, which could disrupt traffic.
illVehicleOccupants	Ill vehicle occupants	One or more occupants of a vehicle are seriously ill, possibly requiring specialist services or assistance. This may disrupt normal traffic flow.

Enumerated value name	Designation	Definition
march	March	A situation where people are walking together in large groups for a common purpose, with potential to disrupt traffic.
other	Other	Other than as defined in this enumeration.
publicDisturbance	Public disturbance	A situation of public disorder, with potential to disrupt traffic.
radioactiveLeakAlert	Radioactive leak alert	An alert to a radioactive leak which may endanger the public and hence may cause traffic disruption.
riot	Riot	A situation of public disorder involving violent behaviour and/or destruction of property with the potential to disrupt traffic.
sabotage	Sabotage	A situation resulting from any act of sabotage.
securityAlert	Security alert	An official alert to a perceived or actual threat of crime or terrorism, which could disrupt traffic.
securityIncident	Security incident	A situation related to a perceived or actual threat of crime or terrorism, which could disrupt traffic.
sightseersObstructingAccess	Sightseers obstructing access	Attendees or sightseers to reported event(s) causing obstruction to access.
strike	Strike	A situation resulting from industrial action that could disrupt traffic.
terroristIncident	Terrorist incident	A situation related to a perceived or actual threat of terrorism, which could disrupt traffic.
theft	Theft	A situation where assets of one or more persons or authorities have been stolen.
toxicCloudAlert	Toxic cloud alert	An alert to a toxic release of gases and/or particulates into the environment which may endanger the public and hence may cause traffic disruption.
unspecifiedAlert	Unspecified alert	An alert to a perceived or actual threat of an unspecified nature, which could disrupt traffic.

Table 93— Values contained in the enumeration "DisturbanceActivityTypeEnum"

A.9.16 The <<enumeration>> "DrivingConditionTypeEnum"

Types of the perceived driving conditions.

Enumerated value name	Designation	Definition
hazardous	Hazardous	Driving conditions are hazardous due to environmental conditions.
impossible	Impossible	Current conditions are making driving impossible.
normal	Normal	Driving conditions are normal.
other	Other	Other than as defined in this enumeration.
passableWithCare	Passable with care	The roadway is passable to vehicles with driver care.
unknown	Unknown	Driving conditions are unknown.
veryHazardous	Very hazardous	Driving conditions are very hazardous due to environmental conditions.
winterConditions	Winter conditions	Driving conditions are consistent with those expected in winter.

Table 94— Values contained in the enumeration "DrivingConditionTypeEnum"

A.9.17 The <<enumeration>> "ExtendedVehicleTypeEnum"

Affected means of transport enum

Enumerated value name	Designation	Definition
agriculturalVehicle	Agricultural vehicle	Vehicle normally used for agricultural purposes, e.g. tractor, combined harvester etc.
allMotorizedTraffic	All motorized traffic	All motorized traffic
allMotorizedTrafficOver35t	All motorized traffic over35t	All motorized traffic over 3.5 tons of mass
allMotorizedTrafficOver75t	All motorized traffic over75t	All motorized traffic over 7.5 tons of mass
anyMode	Any mode	Vehicle corresponding to any mode
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).

Enumerated value name	Designation	Definition
other	Other	Other than as defined in this enumeration.
pedestrian	Pedestrian	Pedestrian
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.
truck	Truck	Truck
truckOver35t	Truck over35t	Truck over 3.5 tons of mass
truckOver75t	Truck over75t	Truck over 7.5 tons of mass
truckWithSemiTrailer	Truck with semi trailer	Truck with semi trailer
truckWithTrailer	Truck with trailer	Truck with trailer
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.
withOddNumberedRegistrationPlat es	With odd numbered registration plates	Vehicle with odd numbered registration plate.

Table 95— Values contained in the enumeration "ExtendedVehicleTypeEnum"

A.9.18 The <<enumeration>> "GeneralInstructionToRoadUsersTypeEnum"

General instructions that may be issued to road users (specifically drivers and sometimes passengers) by an operator or operational system in support of network management activities or emergency situations.

Enumerated value name	Designation	Definition
allowEmergencyVehiclesToPass	Allow emergency vehicles to pass	Allow emergency vehicles to pass.
approachWithCare	Approach with care	Approach with care.
avoidTheArea	Avoid the area	Drivers are to avoid the area.
closeAllWindowsTurnOffHeaterAnd Vents	Close all windows turn off heater and vents	Close all windows and turn off heater and vents.
crossJunctionWithCare	Cross junction with care	Cross junction with care.
doNotAllowUnnecessaryGaps	Do not allow unnecessary gaps	Do not allow unnecessary gaps.
doNotLeaveYourVehicle	Do not leave your vehicle	Do not leave your vehicle.
doNotThrowOutAnyBurningObjects	Do not throw out any burning objects	Do not throw out any burning objects.
doNotUseNavigationSystems	Do not use navigation systems	Do not use navigation systems to determine routing.
driveCarefully	Drive carefully	Drive carefully.
driveWithExtremeCaution	Drive with extreme caution	Drive with extreme caution.
flashYourLights	Flash your lights	Flash your lights to warn oncoming traffic of hazard ahead.
followTheVehicleInFrontSmoothly	Follow the vehicle in front smoothly	Follow the vehicle in front, smoothly.
increaseNormalFollowingDistance	Increase normal following distance	Increase normal following distance.
inEmergencyWaitForPatrolService	In emergency wait for patrol service	In emergency, wait for patrol service (either road operator or police patrol service).
keepYourDistance	Keep your distance	Keep your distance.
leaveYourVehicleProceedToNextS afePlace	Leave your vehicle proceed to next safe place	Leave your vehicle and proceed to next safe place.
noNakedFlames	No naked flames	No naked flames.
noOvertaking	No overtaking	No overtaking on the specified section of road.
noSmoking	No smoking	No smoking.
noStopping	No stopping	No stopping.
noUturns	No U-turns	No U-turns.
observeAmberAlert	Observe amber alert	Observe current amber alert (an emergency alert issued for a missing or abducted child).

Enumerated value name	Designation	Definition
observeSignals	Observe signals	Observe signals.
observeSigns	Observe signs	Observe signs.
onlyTravellfAbsolutelyNecessary	Only travel if absolutely necessary	Only travel if absolutely necessary.
other	Other	Other than as defined in this enumeration.
overtakeWithCare	Overtake with care	Overtake with care.
pullOverToTheEdgeOfTheRoadway	Pull over to the edge of the roadway	Pull over to the edge of the roadway.
stopAtNextSafePlace	Stop at next safe place	Stop at next safe place.
stopAtNextServiceArea	Stop at next service area	Stop at next rest service area or car park.
switchOffEngine	Switch off engine	Switch off engine.
switchOffMobilePhonesAndTwoWa yRadios	Switch off mobile phones and two way radios	Switch off mobile phones and two-way radios.
testYourBrakes	Test your brakes	Test your brakes.
useBusService	Use bus service	Use bus service.
useFogLights	Use fog lights	Use fog lights.
useHazardWarningLights	Use hazard warning lights	Use hazard warning lights.
useHeadlights	Use headlights	Use headlights.
useRailService	Use rail service	Use rail service.
useTramService	Use tram service	Use tram service.
useUndergroundService	Use underground service	Use underground service.
waitForEscortVehicle	Wait for escort vehicle	Wait for escort vehicle.

Table 96— Values contained in the enumeration "GeneralInstructionToRoadUsersTypeEnum"

A.9.19 The <<enumeration>> "GeneralNetworkManagementTypeEnum"

Types of network management actions.

Enumerated value name	Designation	Definition
bridgeSwingInOperation	Bridge swing in operation	The bridge at the specified location has swung or lifted and is therefore temporarily closed to traffic.
convoyService	Convoy service	A convoy service is in operation.
obstacleSignalling	Obstacle signalling	Signs are being put out before or around an obstacle to protect drivers.
other	Other	Other than as defined in this enumeration.
rampMeteringInOperation	Ramp metering in operation	Ramp metering is now active at the specified location.
temporaryTrafficLights	Temporary traffic lights	Traffic is being controlled by temporary traffic lights (red-yellow-green or red-green).
tollGatesOpen	Toll gates open	Toll gates are open with no fee collection at the specified location.
trafficBeingManuallyDirected	Traffic being manually directed	Traffic is being manually directed.
trafficHeld	Traffic held	Traffic in the specified direction is temporarily held up due to an unplanned event (e.g. for clearance of wreckage following an accident).

Table 96— Values contained in the enumeration "GeneralNetworkManagementTypeEnum"

A.9.20 The <<enumeration>> "GipReferenceDirectionEnum"

Enumeation for GipLink reference direction

Enumerated value name	Designation	Definition
fromTo	From to	
toFrom	To from	

Table 97— Values contained in the enumeration "GipReferenceDirectionEnum"

A.9.21 The <<enumeration>> "HeightGradeEnum"

List of height or vertical gradings of road sections.

Enumerated value name	Designation	Definition
aboveGrade	Above grade	Above or over the normal road grade elevation.
atGrade	At grade	At the normal road grade elevation.
belowGrade	Below grade	Below or under the normal road grade elevation.

Table 98— Values contained in the enumeration "HeightGradeEnum"

A.9.22 The <<enumeration>> "InformationStatusEnum"

Status of the related information (i.e. real, test or exercise).

Enumerated value name	Designation	Definition
real	Real	The information is real. It is not a test or exercise.
securityExercise	Security exercise	The information is part of an exercise which is for testing security.
technicalExercise	Technical exercise	The information is part of an exercise which includes tests of associated technical subsystems.
test	Test	The information is part of a test for checking the exchange of this type of information.

Table 99— Values contained in the enumeration "InformationStatusEnum"

A.9.23 The <<enumeration>> "LaneEnum"

List of descriptors identifying specific lanes.

Enumerated value name	Designation	Definition
allLanesCompleteCarriageway	All lanes complete carriageway	In all lanes of the carriageway.
busLane	Bus lane	In the bus lane.
busStop	Bus stop	In the bus stop lane.
carPoolLane	Car pool lane	In the carpool lane.
centralReservation	Central reservation	On the central median separating the two directional carriageways of the highway.
crawlerLane	Crawler lane	In the crawler lane.
emergencyLane	Emergency lane	In the emergency lane.
escapeLane	Escape lane	In the escape lane.
expressLane	Express lane	In the express lane.
hardShoulder	Hard shoulder	On the hard shoulder.
heavyVehicleLane	Heavy vehicle lane	In the heavy vehicle lane.
lane1	Lane1	In the first lane numbered from nearest the hard shoulder to central median.
lane2	Lane2	In the second lane numbered from nearest the hard shoulder to central median.
lane3	Lane3	In the third lane numbered from nearest the hard shoulder to central median.
lane4	Lane4	In the fourth lane numbered from nearest the hard shoulder to central median.
lane5	Lane5	In the fifth lane numbered from nearest the hard shoulder to central median.
lane6	Lane6	In the sixth lane numbered from nearest the hard shoulder to central median.
lane7	Lane7	In the seventh lane numbered from nearest the hard shoulder to central median.
lane8	Lane8	In the eighth lane numbered from nearest the hard shoulder to central median.
lane9	Lane9	In the ninth lane numbered from nearest the hard shoulder to central median.
layBy	Lay by	In a lay-by.

Enumerated value name	Designation	Definition
leftHandTurningLane	Left hand turning lane	In the left hand turning lane.
leftLane	Left lane	In the left lane.
localTrafficLane	Local traffic lane	In the local traffic lane.
middleLane	Middle lane	In the middle lane.
opposingLanes	Opposing lanes	In the opposing lanes.
overtakingLane	Overtaking lane	In the overtaking lane.
rightHandTurningLane	Right hand turning lane	In the right hand turning lane.
rightLane	Right lane	In the right lane.
rushHourLane	Rush hour lane	In the lane dedicated for use during the rush (peak) hour.
setDownArea	Set down area	In the area/lane reserved for passenger pick-up or set-down.
slowVehicleLane	Slow vehicle lane	In the slow vehicle lane.
throughTrafficLane	Through traffic lane	In the through traffic lane.
tidalFlowLane	Tidal flow lane	In the lane dedicated for use as a tidal flow lane.
turningLane	Turning lane	In the turning lane.
verge	Verge	On the verge.

Table 100— Values contained in the enumeration "LaneEnum"

A.9.24 The <<enumeration>> "LinearElementNatureEnum"

List of indicative natures of linear elements.

Enumerated value name	Designation	Definition
other	Other	Other than as defined in this enumeration.
road	Road	The nature of the linear element is a road.
roadSection	Road section	The nature of the linear element is a section of a road.
slipRoad	Slip road	The nature of the linear element is a slip road.

Table 101— Values contained in the enumeration "LinearElementNatureEnum"

A.9.25 The <<enumeration>> "LinearReferencingDirectionEnum"

Directions of traffic flow relative to the direction in which the linear element is defined.

Enumerated value name	Designation	Definition
aligned	Aligned	Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the same sense as the direction in which the linear element is defined.
both	Both	Indicates that both directions of traffic flow are affected by the situation or relate to the traffic data.
opposite	Opposite	Indicates that the direction of traffic flow affected by the situation or related to the traffic data is in the opposite sense to the direction in which the linear element is defined.
unknown	Unknown	Indicates that the direction of traffic flow affected by the situation or related to the traffic data is unknown.

Table 102— Values contained in the enumeration "LinearReferencingDirectionEnum"

A.9.26 The <<enumeration>> "LocationDescriptorEnum"

List of descriptors to help to identify a specific location.

Enumerated value name	Designation	Definition
aroundABendInRoad	Around a bend in road	Around a bend in the road.
atMotorwayInterchange	At motorway interchange	At a motorway interchange.
atRestArea	At rest area	At rest area off the carriageway.
atServiceArea	At service area	At service area.
atTollPlaza	At toll plaza	At toll plaza.
atTunnelEntryOrExit	At tunnel entry or exit	At entry or exit of tunnel.
inbound	Inbound	On the carriageway or lane which is inbound towards the centre of the town or city.
inGallery	In gallery	In gallery.
inTheCentre	In the centre	In the centre of the roadway.
inTheOppositeDirection	In the opposite direction	In the opposite direction.
inTunnel	In tunnel	In tunnel.
onBorder	On border	On border crossing.
onBridge	On bridge	On bridge.
onConnector	On connector	On connecting carriageway between two different roads or road sections.
onElevatedSection	On elevated section	On elevated section of road.
onFlyover	On flyover	On flyover, i.e. on section of road over another road.
onIceRoad	On ice road	On ice road.
onLevelCrossing	On level crossing	On level-crossing.
onLinkRoad	On link road	On road section linking two different roads.
onPass	On pass	On mountain pass.
onRoundabout	On roundabout	On roundabout.
onTheLeft	On the left	On the left of the roadway.
onTheRight	On the right	On the right of the roadway.
onTheRoadway	On the roadway	On the roadway.
onUndergroundSection	On underground section	On underground section of road.

Enumerated value name	Designation	Definition
onUnderpass	On underpass	On underpass, i.e. section of road which passes under another road.
outbound	Outbound	On the carriageway or lane which is outbound from the centre of the town or city.
overCrestOfHill	Over crest of hill	Over the crest of a hill.
withinJunction	Within junction	On the main carriageway within a junction between exit slip road and entry slip road.

Table 103— Values contained in the enumeration "LocationDescriptorEnum"

A.9.27 The <<enumeration>> "MobilityEnum"

Types of mobility relating to a situation element defined by a SituationReord.

Enumerated value name	Designation	Definition
mobile	Mobile	The described element of a situation is moving.
stationary	Stationary	The described element of a situation is stationary.
unknown	Unknown	The mobility of the described element of a situation is unknown.

Table 104— Values contained in the enumeration "MobilityEnum"

A.9.28 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 105— Values contained in the enumeration "MonthOfYearEnum"

A.9.29 The <<enumeration>> "ObstructionTypeEnum"

Types of obstructions on the roadway.

Enumerated value name	Designation	Definition
airCrash	Air crash	An air crash adjacent to the roadway which may cause traffic disruption.
childrenOnRoadway	Children on roadway	Children on the roadway which may cause traffic disruption.
clearanceWork	Clearance work	Clearance work associated with an earlier traffic problem which may cause traffic disruption.
craneOperating	Crane operating	A crane is operating either on or adjacent to the road which may cause an obstruction to traffic.
cyclistsOnRoadway	Cyclists on roadway	Cyclists on the roadway which may cause traffic disruption.
debris	Debris	Scattered fragments of wreckage or other material on the road.
explosion	Explosion	A situation where an explosive or incendiary device has gone off.
explosionHazard	Explosion hazard	A situation where there is danger of an explosion which may cause disruption to traffic.
hazardsOnTheRoad	Hazards on the road	Unspecified hazard(s) on the road which may cause traffic disruption.
highSpeedChase	High speed chase	Authorised and unauthorised vehicles are travelling at high speeds along the roadway. This may present a hazard to other vehicles.
houseFire	House fire	House fire(s) near the road way resulting in smoke and driver distraction which may cause traffic disruption.
incident	Incident	Incidents are chance occurrences involving vehicles from the traffic stream, which could present potential hazards to road users. This item excludes accidents.
industrialAccident	Industrial accident	Industrial accident near the roadway which may cause traffic disruption.
objectOnTheRoad	Object on the road	The road may be obstructed or traffic hindered due to objects laying on the roadway.
objectsFallingFromMovingVehicle	Objects falling from moving vehicle	Objects falling from moving vehicles which are presenting a hazard to other vehicles.

Enumerated value name	Designation	Definition
obstructionOnTheRoad	Obstruction on the road	Unspecified obstruction on the roadway which may cause traffic disruption.
other	Other	Other than as defined in this enumeration.
peopleOnRoadway	People on roadway	People on the roadway which may cause traffic disruption.
railCrash	Rail crash	A rail crash adjacent to the roadway which may cause traffic disruption.
recklessDriver	Reckless driver	A vehicle being driven without due care and attention is causing a hazard to other vehicles.
rescueAndRecoveryWork	Rescue and recovery work	Work is being undertaken by emergency services which may present a hazard to road users.
severeFrostDamagedRoadway	Severe frost damaged roadway	Severe frost damage to the roadway causing an obstruction to traffic.
shedLoad	Shed load	Spillage of transported goods on the roadway which may cause traffic disruption.
snowAndIceDebris	Snow and ice debris	Snow and ice debris on the roadway which may present a hazard to road users.
spillageOccurringFromMovingVehic le	Spillage occurring from moving vehicle	Substances are spilling out from a moving vehicle which is presenting a hazard to other road users.
spillageOnTheRoad	Spillage on the road	Includes all situations where a spillage has occurred on the roadway due to an earlier incident.
unprotectedAccidentArea	Unprotected accident area	An accident area which has not been protected and may present a hazard to road users.

Table 106— Values contained in the enumeration "ObstructionTypeEnum"

A.9.30 The <<enumeration>> "OpenIrFormOfWayEnum"

Enumeration of for of way

Enumerated value name	Designation	Definition
motorway	Motorway	motorway
multipleCarriageway	Multiple carriageway	multipleCarrigeway
other	Other	other
roundabout	Roundabout	roadabout
singleCarriageway	Single carriageway	single carrigeway
slipRoad	Slip road	sliproad
trafficSquare	Traffic square	traffic square
undefined	Undefined	undefined

Table 107— Values contained in the enumeration "OpenIrFormOfWayEnum"

A.9.31 The <<enumeration>> "OpenIrFunctionalRoadClassEnum"

Enemuration of functional road class

Enumerated value name	Designation	Definition
FRC0	Frc0	Main road, highest importance
FRC1	Frc1	First class road
FRC2	Frc2	Second class road
FRC3	Frc3	Third class road
FRC4	Frc4	Fourth class road
FRC5	Frc5	Fifth class road
FRC6	Frc6	Sixth class road
FRC7	Frc7	Other class road, lowest importance

Table 108— Values contained in the enumeration "OpenIrFunctionalRoadClassEnum"

A.9.32 The <<enumeration>> "OpenIrOrientationEnum"

Enumeration of side of road

Enumerated value name	Designation	Definition
againstLineDirection	Against line direction	Against line direction
both	Both	Both directions
noOrientationOrUnknown	No orientation or unknown	No orientation or unknown
withLineDirection	With line direction	With line direction

Table 109— Values contained in the enumeration "OpenIrOrientationEnum"

A.9.33 The <<enumeration>> "OpenIrSideOfRoadEnum"

Enumeration of side of road

Enumerated value name	Designation	Definition
both	Both	both
left	Left	left
onRoadOrUnknown	On road or unknown	On road or unknown
right	Right	right

Table 110— Values contained in the enumeration "OpenIrSideOfRoadEnum"

A.9.34 The <<enumeration>> "OperatorActionOriginEnum"

Origins of operator actions.

Enumerated value name	Designation	Definition
external	External	Operator action originated externally to the authority which is taking the action.
internal	Internal	Operator action originated within the authority which is taking the action.

Table 111— Values contained in the enumeration "OperatorActionOriginEnum"

A.9.35 The <<enumeration>> "OperatorActionStatusEnum"

List of statuses associated with operator actions.

Enumerated value name	Designation	Definition
approved	Approved	The action has been approved by the recipient of the request but activity to implement the action has not yet commenced.
beingImplemented	Being implemented	The action is in the process of being implemented.
beingTerminated	Being terminated	The action is in the process of being terminated either because the action has reached the end of its validity period or because new circumstances have arisen and its termination has been requested, e.g. because of a traffic jam on the alternative route.
implemented	Implemented	The action is fully implemented.
rejected	Rejected	The action has been rejected by the recipient of the request and hence is not implemented.
requested	Requested	A request, either internal or external, has been received to implement an action. It has neither been approved nor has any activity yet been undertaken to implement the action.
terminationRequested	Termination requested	A request, either internal or external, has been received to terminate the action, but activity to terminate the action has not yet commenced.

Table 112— Values contained in the enumeration "OperatorActionStatusEnum"

A.9.36 The <<enumeration>> "PersonCategoryEnum"

Categories of person.

Enumerated value name	Designation	Definition
adult	Adult	Adult.
child	Child	Child (age 4 to 17).
emergencyServicesPerson	Emergency services person	A member of the emergency services, other than the police.
fireman	Fireman	A member of the fire service.
infant	Infant	Infant (age 0 to 3).
medicalStaff	Medical staff	A member of the medical service.
memberOfThePublic	Member of the public	A member of the general public.
policeman	Policeman	A member of the police force.
politician	Politician	A politician.
publicTransportPassenger	Public transport passenger	A passenger on or from a public transport vehicle.
sickPerson	Sick person	A sick person.
trafficOfficer	Traffic officer	A traffic patrol officer of the road authority.
trafficWarden	Traffic warden	A member of the local traffic warden service.
veryImportantPerson	Very important person	A very important person.

Table 113— Values contained in the enumeration "PersonCategoryEnum"

A.9.37 The <<enumeration>> "PlacesEnum"

List of types of places.

Enumerated value name	Designation	Definition
aroundBendsInTheRoad	Around bends in the road	Around bends in the road.
atCustomsPosts	At customs posts	At customs posts.
atHighAltitudes	At high altitudes	At high altitudes.
atTollPlazas	At toll plazas	At toll plazas.
inBuiltUpAreas	In built up areas	In built up areas, i.e. villages, towns and cities.
inContraflowSections	In contraflow sections	In sections of the road where contraflow is in operation.
inForestedAreas	In forested areas	On sections of the road where it runs through or adjacent to forested areas.
inGalleries	In galleries	In galleries.
inLowLyingAreas	In low lying areas	In low lying areas.
inRoadworksAreas	In roadworks areas	In roadworks areas.
inRuralAreas	In rural areas	In rural areas, i.e. outside villages, towns and cities.
inShadedAreas	In shaded areas	In shaded areas.
inTheCityCentre	In the city centre	In the city centre.
inTheInnerCityAreas	In the inner city areas	In the inner city areas.
inTunnels	In tunnels	In tunnels.
onBridges	On bridges	On bridges.
onDownHillSections	On down hill sections	On down hill sections of the road.
onDualCarriagewaySections	On dual carriageway sections	On dual carriageway sections of the road.
onElevatedSections	On elevated sections	On elevated sections of the road.
onEnteringOrLeavingTunnels	On entering or leaving tunnels	On entering or leaving tunnels.
onEnteringTheCountry	On entering the country	On entry into the country.
onFlyovers	On flyovers	On flyover sections of the road, i.e. sections of the road which pass over another road.
onLeavingTheCountry	On leaving the country	On leaving the country.
onMotorways	On motorways	On motorways.
onNonMotorways	On non motorways	On non motorways.

Enumerated value name	Designation	Definition
onPasses	On passes	On mountain passes.
onRoundabouts	On roundabouts	On roundabouts.
onSingleCarriagewaySections	On single carriageway sections	On single carriageway sections of the road.
onSlipRoads	On slip roads	On slip roads.
onUndergroundSections	On underground sections	On underground sections of the road.
onUnderpasses	On underpasses	On underpasses, i.e. sections of the road which pass under another road.
onUpHillSections	On up hill sections	On hill sections of the road.
other	Other	Other than as defined in this enumeration.
overTheCrestOfHills	Over the crest of hills	Over the crest of hills.

Table 114— Values contained in the enumeration "PlacesEnum"

A.9.38 The <<enumeration>> "ProbabilityOfOccurrenceEnum"

Levels of confidence that the sender has in the information, ordered {certain, probable, risk of}.

Enumerated value name	Designation	Definition
certain	Certain	The source is completely certain of the occurrence of the situation record version content.
probable	Probable	The source has a reasonably high level of confidence of the occurrence of the situation record version content.
riskOf	Risk of	The source has a moderate level of confidence of the occurrence of the situation record version content.

Table 115— Values contained in the enumeration "ProbabilityOfOccurrenceEnum"

A.9.39 The <<enumeration>> "PublicEventTypeEnum"

Types of public events.

Enumerated value name	Designation	Definition
agriculturalShow	Agricultural show	Agricultural show or event which could disrupt traffic.
airShow	Air show	Air show or other aeronautical event which could disrupt traffic.
athleticsMeeting	Athletics meeting	Athletics event that could disrupt traffic.
ballGame	Ball game	Ball game event that could disrupt traffic.
baseballGame	Baseball game	Baseball game event that could disrupt traffic.
basketballGame	Basketball game	Basketball game event that could disrupt traffic.
bicycleRace	Bicycle race	Bicycle race that could disrupt traffic.
boatRace	Boat race	Regatta (boat race event of sailing, powerboat or rowing) that could disrupt traffic.
boatShow	Boat show	Boat show which could disrupt traffic.
boxingTournament	Boxing tournament	Boxing event that could disrupt traffic.
bullFight	Bull fight	Bull fighting event that could disrupt traffic.
ceremonialEvent	Ceremonial event	Formal or religious act, rite or ceremony that could disrupt traffic.
commercialEvent	Commercial event	Commercial event which could disrupt traffic.
concert	Concert	Concert event that could disrupt traffic.
cricketMatch	Cricket match	Cricket match that could disrupt traffic.
culturalEvent	Cultural event	Cultural event which could disrupt traffic.
exhibition	Exhibition	Major display or trade show which could disrupt traffic.
fair	Fair	Periodic (e.g. annual), often traditional, gathering for entertainment or trade promotion, which could disrupt traffic.
festival	Festival	Celebratory event or series of events which could disrupt traffic.
filmTVMaking	Film TV making	Film or TV making event which could disrupt traffic.
footballMatch	Football match	Football match that could disrupt traffic.

Enumerated value name	Designation	Definition
funfair	Funfair	Periodic (e.g. annual), often traditional, gathering for entertainment, which could disrupt traffic.
gardeningOrFlowerShow	Gardening or flower show	Gardening and/or flower show or event which could disrupt traffic.
golfTournament	Golf tournament	Golf tournament event that could disrupt traffic.
hockeyGame	Hockey game	Hockey game event that could disrupt traffic.
horseRaceMeeting	Horse race meeting	Horse race meeting that could disrupt traffic.
internationalSportsMeeting	International sports meeting	Large sporting event of an international nature that could disrupt traffic.
majorEvent	Major event	Significant organised event either on or near the roadway which could disrupt traffic.
marathon	Marathon	Marathon, cross-country or road running event that could disrupt traffic.
market	Market	Periodic (e.g. weekly) gathering for buying and selling, which could disrupt traffic.
match	Match	Sports match of unspecified type that could disrupt traffic.
motorShow	Motor show	Motor show which could disrupt traffic.
motorSportRaceMeeting	Motor sport race meeting	Motor sport race meeting that could disrupt traffic.
other	Other	Other than as defined in this enumeration.
parade	Parade	Formal display or organised procession which could disrupt traffic.
procession	Procession	An organised procession which could disrupt traffic.
raceMeeting	Race meeting	Race meeting (other than horse or motor sport) that could disrupt traffic.
rugbyMatch	Rugby match	Rugby match that could disrupt traffic.
severalMajorEvents	Several major events	A series of significant organised events either on or near the roadway which could disrupt traffic.
show	Show	Entertainment event that could disrupt traffic.

Enumerated value name	Designation	Definition
showJumping	Show jumping	Horse showing jumping and tournament event that could disrupt traffic.
sportsMeeting	Sports meeting	Sports event of unspecified type that could disrupt traffic.
stateOccasion	State occasion	Public ceremony or visit of national or international significance which could disrupt traffic.
tennisTournament	Tennis tournament	Tennis tournament that could disrupt traffic.
tournament	Tournament	Sporting event or series of events of unspecified type lasting more than one day which could disrupt traffic.
tradeFair	Trade fair	A periodic (e.g. annual), often traditional, gathering for trade promotion, which could disrupt traffic.
waterSportsMeeting	Water sports meeting	Water sports meeting that could disrupt traffic.
winterSportsMeeting	Winter sports meeting	Winter sports meeting or event (e.g. skiing, ski jumping, skating) that could disrupt traffic.

Table 116— Values contained in the enumeration "PublicEventTypeEnum"

A.9.40 The <<enumeration>> "ReferentTypeEnum"

A set of types of known points along a linear object such as a road.

Enumerated value name	Designation	Definition
boundary	Boundary	A boundary between two jurisdictional or administrative areas. These may be legal boundaries such as between counties or countries, maintenance responsibility boundaries or control boundaries.
intersection	Intersection	A crossing of two or more roads where the precise point of intersection is defined according to specific business rules.
landmark	Landmark	A visible identifiable physical landmark either alongside or close to the linear object.
referenceMarker	Reference marker	A marker which is usually but not necessarily physical that is one of a sequence which are spaced out along the linear object (road) to provide a location reference. The spacing of markers is not necessarily even.
roadNode	Road node	A topological node defined on a road network. Such nodes may delineate the segmentation of the road network according to defined business rules or may constitute a purely topological representation of a road network.

Table 117— Values contained in the enumeration "ReferentTypeEnum"

A.9.41 The <<enumeration>> "ReroutingManagementTypeEnum"

Management actions relating to rerouting.

Enumerated value name	Designation	Definition
doNotFollowDiversionSigns	Do not follow diversion signs	Do not follow diversion signs.
doNotUseEntry	Do not use entry	Rerouted traffic is not to use the specified entry onto the identified road to commence the alternative route.
doNotUseExit	Do not use exit	Rerouted traffic is not to use the specified exit from the identified road to commence the alternative route.
doNotUseIntersectionOrJunction	Do not use intersection or junction	Rerouted traffic is not to use the specified intersection or junction.
followDiversionSigns	Follow diversion signs	Rerouted traffic is to follow the diversion signs.
followLocalDiversion	Follow local diversion	Rerouted traffic is to follow local diversion.
followSpecialMarkers	Follow special markers	Rerouted traffic is to follow the special diversion markers.
useEntry	Use entry	Rerouted traffic is to use the specified entry onto the identified road to commence the alternative route.
useExit	Use exit	Rerouted traffic is to use the specified exit from the identified road to commence the alternative route.
useIntersectionOrJunction	Use intersection or junction	Rerouted traffic is to use the specified intersection or junction to commence the alternative route.

Table 118— Values contained in the enumeration "ReroutingManagementTypeEnum"

A.9.42 The <<enumeration>> "RoadOrCarriagewayOrLaneManagementTypeEnum"

Management actions relating to road, carriageway or lane usage.

Enumerated value name	Designation	Definition
carPoolLaneInOperation	Car pool lane in operation	Dedicated car pool lane(s) are in operation for vehicles carrying at least the specified number of occupants.
carriagewayClosures	Carriageway closures	Carriageway closures are in operation at the specified location.
clearALaneForEmergencyVehicles	Clear a lane for emergency vehicles	Clear a lane for emergency vehicles.
clearALaneForSnowploughsAndGri ttingVehicles	Clear a lane for snowploughs and gritting vehicles	Clear a lane for snow ploughs and gritting vehicles.
closedPermanentlyForTheWinter	Closed permanently for the winter	The road is closed to vehicles with the specified characteristics or all, if none defined, for the duration of the winter.
contraflow	Contraflow	Two-way traffic is temporarily sharing a single carriageway.
doNotUseSpecifiedLanesOrCarriag eways	Do not use specified lanes or carriageways	Do not use the specified lane(s) or carriageway(s).
hardShoulderRunningInOperation	Hard shoulder running in operation	The hard shoulder is open as an operational lane.
heightRestrictionInOperation	Height restriction in operation	A height restriction is in operation.
intermittentShortTermClosures	Intermittent short term closures	Road closures occur intermittently on the specified road in the specified direction for short durations.
keepToTheLeft	Keep to the left	Keep to the left.
keepToTheRight	Keep to the right	Keep to the right.
laneClosures	Lane closures	Lane closures are in operation at the specified location for vehicles with the specified characteristics or all, if none defined, in the specified direction.
lanesDeviated	Lanes deviated	Lane deviations are in operation at the specified location.
narrowLanes	Narrow lanes	Normal lane widths are temporarily reduced.
newRoadworksLayout	New roadworks layout	A new layout of lanes/carriageway has been implemented associated with roadworks.
other	Other	Other than as defined in this enumeration.

Enumerated value name	Designation	Definition
overnightClosures	Overnight closures	Every night the road is closed to vehicles with the specified characteristics or all, if none defined, in the specified direction by decision of the appropriate authorities.
roadCleared	Road cleared	The road has been cleared of earlier reported problems.
roadClosed	Road closed	The road is closed to vehicles with the specified characteristics or all, if none defined, in the specified direction.
rollingRoadBlock	Rolling road block	Traffic officers or police are driving slowly in front of a queue of traffic to create a gap in the traffic to allow for clearance activities to take place in safety on the road ahead.
rushHourLaneInOperation	Rush hour lane in operation	Dedicated rush (peak) hour lane(s) are in operation.
singleAlternateLineTraffic	Single alternate line traffic	Traffic is being controlled to move in alternate single lines. This control may be undertaken by traffic lights or flagman.
tidalFlowLaneInOperation	Tidal flow lane in operation	Dedicated tidal flow lane(s) are in operation in the specified direction.
turnAroundInOperation	Turn around in operation	Traffic is being directed back down the opposite carriageway, possibly requiring the temporary removal of the central crash barrier.
useOfSpecifiedLanesOrCarriagewa ysAllowed	Use of specified lanes or carriageways allowed	The specified lane(s) or carriageway(s) may be used. The normal lane(s) or carriageway(s) restrictions are not currently in force.
useSpecifiedLanesOrCarriageways	Use specified lanes or carriageways	Use the specified lane(s) or carriageway(s).
vehicleStorageInOperation	Vehicle storage in operation	Vehicles are being stored on the roadway and/or at a rest area or service area at the specified location.
weightRestrictionInOperation	Weight restriction in operation	A weight restriction is in operation.

Table 119— Values contained in the enumeration "RoadOrCarriagewayOrLaneManagementTypeEnum"

A.9.43 The <<enumeration>> "SeverityEnum"

Levels of severity of a situation as whole assessed by the impact that the situation may have on traffic flow as perceived by the supplier.

Enumerated value name	Designation	Definition
high	High	Perceived by supplier as being of a high level.
highest	Highest	Perceived by supplier as being of the highest level.
low	Low	Perceived by supplier as being of a low level.
lowest	Lowest	Perceived by supplier as being of the lowest discernible level.
medium	Medium	Perceived by supplier as being of a medium level.
none	None	Perceived by supplier as having a severity rating of none.
unknown	Unknown	Perceived by supplier as being of an unknown level.

Table 120— Values contained in the enumeration "SeverityEnum"

A.9.44 The <<enumeration>> "SourceTypeEnum"

Type of sources from which situation information may be derived.

Enumerated value name	Designation	Definition
automobileClubPatrol	Automobile club patrol	A patrol of an automobile club.
cameraObservation	Camera observation	A camera observation (either still or video camera).
freightVehicleOperator	Freight vehicle operator	An operator of freight vehicles.
inductionLoopMonitoringStation	Induction loop monitoring station	A station dedicated to the monitoring of the road network by processing inductive loop information.
infraredMonitoringStation	Infrared monitoring station	A station dedicated to the monitoring of the road network by processing infrared image information.
microwaveMonitoringStation	Microwave monitoring station	A station dedicated to the monitoring of the road network by processing microwave information.
mobileTelephoneCaller	Mobile telephone caller	A caller using a mobile telephone (who may or may not be on the road network).
nonPoliceEmergencyServicePatrol	Non police emergency service patrol	Emergency service patrols other than police.
otherInformation	Other information	Other sources of information.
otherOfficialVehicle	Other official vehicle	Personnel from a vehicle belonging to the road operator or authority or any emergency service, including authorised breakdown service organisations.
policePatrol	Police patrol	A police patrol.
privateBreakdownService	Private breakdown service	A private breakdown service.
publicAndPrivateUtilities	Public and private utilities	A utility organisation, either public or private.
registeredMotoristObserver	Registered motorist observer	A motorist who is an officially registered observer.
roadAuthorities	Road authorities	A road authority.
roadOperatorPatrol	Road operator patrol	A patrol of the road operator or authority.
roadsideTelephoneCaller	Roadside telephone caller	A caller who is using an emergency roadside telephone.
spotterAircraft	Spotter aircraft	A spotter aircraft of an organisation specifically assigned to the monitoring of the traffic network.
trafficMonitoringStation	Traffic monitoring station	A station, usually automatic, dedicated to the monitoring of the road network.

Enumerated value name	Designation	Definition
transitOperator	Transit operator	An operator of a transit service, e.g. bus link operator.
vehicleProbeMeasurement	Vehicle probe measurement	A specially equipped vehicle used to provide measurements.
videoProcessingMonitoringStation	Video processing monitoring station	A station dedicated to the monitoring of the road network by processing video image information.

Table 121— Values contained in the enumeration "SourceTypeEnum"

A.9.45 The <<enumeration>> "SpeedManagementTypeEnum"

Management actions relating to speed.

Enumerated value name	Designation	Definition
activeSpeedControlInOperation	Active speed control in operation	Automatic speed control measures are in place at the specified location, whereby speed limits are set by an automatic system which is triggered by traffic sensing equipment.
doNotSlowdownUnnecessarily	Do not slowdown unnecessarily	Do not slow down unnecessarily.
observeSpeedLimit	Observe speed limit	Observe speed limit.
other	Other	Other than as defined in this enumeration.
policeSpeedChecksInOperation	Police speed checks in operation	Police speed checks are in operation.
reduceYourSpeed	Reduce your speed	Reduce your speed.
speedRestrictionInOperation	Speed restriction in operation	A speed restriction is in operation.

Table 122— Values contained in the enumeration "SpeedManagementTypeEnum"

A.9.46 The <<enumeration>> "TrafficConstrictionTypeEnum"

Types of constriction to which traffic is subjected as a result of an event.

Enumerated value name	Designation	Definition
carriagewayBlocked	Carriageway blocked	The carriageway is totally obstructed in the specified direction due to an unplanned event.
carriagewayPartiallyObstructed	Carriageway partially obstructed	The carriageway is partially obstructed in the specified direction due to an unplanned event.
lanesBlocked	Lanes blocked	One or more lanes is totally obstructed in the specified direction due to an unplanned event.
lanesPartiallyObstructed	Lanes partially obstructed	One or more lanes is partially obstructed in the specified direction due to an unplanned event.
roadBlocked	Road blocked	The road is totally obstructed, for all vehicles in both directions, due to an unplanned event.
roadPartiallyObstructed	Road partially obstructed	The road is partially obstructed in both directions due to an unplanned event.

Table 123— Values contained in the enumeration "TrafficConstrictionTypeEnum"

A.9.47 The <<enumeration>> "TrafficTypeEnum"

Types of traffic, mostly classified by its destination type.

Enumerated value name	Designation	Definition
accessOnlyTraffic	Access only traffic	Traffic destined for local access only.
destinedForAirport	Destined for airport	Traffic destined for the airport.
destinedForAirportArrivals	Destined for airport arrivals	Traffic destined for airport arrivals.
destinedForAirportDepartures	Destined for airport departures	Traffic destined for airport departures.
destinedForFerryService	Destined for ferry service	Traffic destined for the ferry service.
destinedForRailService	Destined for rail service	Traffic destined for the rail service.
holidayTraffic	Holiday traffic	Traffic heading towards holiday destinations.
localTraffic	Local traffic	Traffic heading towards local destinations.
longDistanceTraffic	Long distance traffic	Traffic heading towards destinations which are a long distance away.
regionalTraffic	Regional traffic	Traffic heading towards local regional destinations.
residentsOnlyTraffic	Residents only traffic	Local residents only traffic.
throughTraffic	Through traffic	Traffic which is not for local access, i.e. traffic not destined for local town, city or built up area but for transit though the area.
visitorTraffic	Visitor traffic	Traffic heading towards local visitor attraction.

Table 124— Values contained in the enumeration "TrafficTypeEnum"

A.9.48 The <<enumeration>> "UrgencyEnum"

Degrees of urgency that a receiving client should associate with the disseminate of the information contained in the publication.

Enumerated value name	Designation	Definition
extremelyUrgent	Extremely urgent	Dissemination of the information is extremely urgent.
normalUrgency	Normal urgency	Dissemination of the information is of normal urgency.
urgent	Urgent	Dissemination of the information is urgent.

Table 125— Values contained in the enumeration "UrgencyEnum"

A.9.49 The <<enumeration>> "UrlLinkTypeEnum"

Types of URL links.

Enumerated value name	Designation	Definition
documentPdf	Document PDF	URL link to a pdf document.
html	HTML	URL link to an html page.
image	Image	URL link to an image.
other	Other	Other than as defined in this enumeration.
rss	RSS	URL link to an RSS feed.
videoStream	Video stream	URL link to a video stream.
voiceStream	Voice stream	URL link to a voice stream.

Table 126— Values contained in the enumeration "UrlLinkTypeEnum"

A.9.50 The <<enumeration>> "ValidityStatusEnum"

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

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 127— Values contained in the enumeration "ValidityStatusEnum"

A.9.51 The <<enumeration>> "VehicleObstructionTypeEnum"

Types of obstructions involving vehicles.

Enumerated value name	Designation	Definition
abandonedVehicle	Abandoned vehicle	Abandoned vehicle(s) on the roadway which may cause traffic disruption.
abnormalLoad	Abnormal load	Vehicle(s) carrying exceptional load(s) which may cause traffic disruption.
brokenDownBus	Broken down bus	Broken down passenger vehicle(s) on the carriageway which may cause traffic disruption.
brokenDownHeavyLorry	Broken down heavy lorry	Broken down heavy lorry/lorries on the carriageway which may cause traffic disruption.
brokenDownVehicle	Broken down vehicle	Broken down vehicle(s) on the carriageway which may cause traffic disruption.
convoy	Convoy	A group of vehicles moving together in formation which may cause traffic disruption.
damagedVehicle	Damaged vehicle	Damaged vehicle(s) on the carriageway which may cause traffic disruption.
dangerousSlowMovingVehicle	Dangerous slow moving vehicle	Dangerous slow moving vehicles which may cause traffic disruption.
emergencyVehicle	Emergency vehicle	Emergency service vehicles on the roadway in response to an emergency situation.
highSpeedEmergencyVehicle	High speed emergency vehicle	Emergency service vehicles progressing at high speed along the roadway in response to or en route from an emergency situation.
longLoad	Long load	A vehicle of length greater than that normally allowed which may cause traffic disruption.
militaryConvoy	Military convoy	A group of military vehicles moving together in formation which may cause traffic disruption.
other	Other	Other than as defined in this enumeration.
overheightVehicle	Overheight vehicle	Vehicles of height greater than normally allowed which may cause traffic disruption.
prohibitedVehicleOnTheRoadway	Prohibited vehicle on the roadway	Vehicles not normally permitted on the highway are present which may cause traffic disruption.
saltingOrGrittingVehicleInUse	Salting or gritting vehicle in use	Salting and gritting vehicles are in use which may cause traffic disruption.

Enumerated value name	Designation	Definition
slowMovingMaintenanceVehicle	Slow moving maintenance vehicle	Slow moving vehicles undertaking maintenance work may pose a hazard to other vehicles on the carriageway.
slowVehicle	Slow vehicle	A vehicle travelling at well below normal highway speeds which may cause traffic disruption.
snowplough	Snowplough	Snowploughs are in use which may cause traffic disruption.
trackLayingVehicle	Track laying vehicle	Tracked vehicles are in use which may cause traffic disruption.
unlitVehicleOnTheRoad	Unlit vehicle on the road	Vehicles without lights are in use which may present a hazard to road users.
vehicleCarryingHazardousMaterials	Vehicle carrying hazardous materials	Vehicles carrying materials of a hazardous nature are present and these could expose road users to additional hazards.
vehicleInDifficulty	Vehicle in difficulty	A vehicle is experiencing difficulties (e.g. manoeuvring or propulsion difficulties) which may cause traffic disruption.
vehicleOnFire	Vehicle on fire	A vehicle is or has been on fire and may cause traffic disruption.
vehicleOnWrongCarriageway	Vehicle on wrong carriageway	A vehicle is travelling the wrong way along a divided highway (i.e. on the wrong side).
vehicleStuck	Vehicle stuck	One or more vehicles are stuck (i.e. unable to move) due to environmental conditions such as a snow drift or severe icy road.
vehicleStuckUnderBridge	Vehicle stuck under bridge	A vehicle is stuck under a bridge.
vehicleWithOverheightLoad	Vehicle with overheight load	An over-height vehicle which may present a hazard to road users.
vehicleWithOverwideLoad	Vehicle with overwide load	A vehicle of width greater than that normally allowed which may cause traffic disruption.

Table 128— Values contained in the enumeration "VehicleObstructionTypeEnum"

A.9.52 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.
withEvenNumberedRegistrationPlat es	With even numbered registration plates	Vehicle with even numbered registration plate.
withOddNumberedRegistrationPlat es	With odd numbered registration plates	Vehicle with odd numbered registration plate.

Table 129— Values contained in the enumeration "VehicleTypeEnum"

A.9.53 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 130— Values contained in the enumeration "WeekOfMonthEnum"

A.9.54 The <<enumeration>> "WinterEquipmentManagementTypeEnum"

Instructions relating to the use of winter equipment.

Enumerated value name	Designation	Definition
doNoUseStudTyres	Do no use stud tyres	Do not use stud tyres.
other	Other	Other than as defined in this enumeration.
useSnowChains	Use snow chains	Use snow chains.
useSnowChainsOrTyres	Use snow chains or tyres	Use snow chains or snow tyres.
useSnowTyres	Use snow tyres	Use snow tyres.
winterEquipmentOnBoardRequired	Winter equipment on board required	The carrying of winter equipment (snow chains and/or snow tyres) is required.

Table 131— Values contained in the enumeration "WinterEquipmentManagementTypeEnum"