

# Hungarian Events Profile

Version 1.0

## A.1 Introduction

Magyar Közút (Hungarian Public Roads) provides DATEX II traffic data of the Hungarian national road network for service providers to be distributed to road users.

This document describes the Hungarian planned and unplanned events (hereinafter referred to as: events). Events cover a wide range of event types that potentially cause short-term and long-term disruptions to traffic. The goal of this profile documentation is to have a better understanding of our data usage, structure, and point of view.

Planned events include construction and maintenance works, public events, disturbance activities and lane or carriageway management actions carried out by Magyar Közút. This profile uses DATEX II SituationPublication and is fit for DATEX II version 2.3.

A situation can have different types of situation records. Basically, there is general information about the event type, some of them have road management information in connection with the event type, the situations contain detailed data about location, schedule, restrictions, speed limit etc.

The information source for the events is the physical equipment alongside the roads. The colleagues at the maintenance centers (called dispatchers) detect the situations (or have the information about a roadwork being done by Magyar Közút) and record them in the Dispatching System (DIS). The output of this system follows the Datex structure. All the information is created using human resources, the process is not automated.

### Specialities in our DATEX

- We use NetworkManagement package not just for the operator actions but for other types of events too, where it is viable. For example, a planned demonstration (public event) can lead to some network management actions, so these records are related and are in the same situation as different situation records.

```
- <situation id="hu_UTINFORM_467203" version="1">
  <situationVersionTime>2021-11-05T10:17:52+01:00</situationVersionTime>
  - <headerInformation>
    <confidentiality>noRestriction</confidentiality>
    <informationStatus>real</informationStatus>
    <urgency>urgent</urgency>
  </headerInformation>
  + <situationRecord xsi:type="PublicEvent" id="hu_UTINFORM_467203_1" version="1">
  + <situationRecord xsi:type="GeneralNetworkManagement" id="hu_UTINFORM_467203_2" version="1">
</situation>
```

- Reusable class: *subjects* is used for construction works and some maintenance works to specify the subject of the work.
- Extension: *maintenanceWorksExtension* is used to specify maintenance works where it cannot be written with the reusable class of *subjects*.
- In the *SpeedManagement* record, the value of the speed limit is the lowest speed limit on the restricted section. For example, if a construction work is in progress and a traffic diversion is established then the speed limit is often applied in stages – the difference between the limits cannot be more than 40 km/h.
- Both planned and unplanned events can have *trafficConstrictionType* values.

- *RoadOrCarriagewayOrLaneManagement* is only used for planned events, when a network management action is carried out by Magyar Közút. If an unplanned event happens, the information about the constriction type is available in the *trafficConstrictionType* element. Information about weight restrictions is implemented too using *weightRestrictionInOperation* with *GrossWeightCharacteristics*.
- The number of original and restricted lanes is available in the *Impact* class → this will help to calculate the capacity remaining that describes the real situation.
- The exact restricted lanes are marked in the *affectedCarriagewaysAndLanes* element using *CarriagewayEnum* and *LaneEnum*.

## A.2 General structure of planned events

*Code listing 1* shows an example of a planned event encoded in DATEXII. As mentioned in the previous Section, the most basic (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"?>
<d2LogicalModel modelBaseVersion="2">
  <exchange>
    <supplierIdentification>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="SituationPublication" lang="hu">
    <publicationTime>2022-03-08T16:22:05+01:00</publicationTime>
    <publicationCreator>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </publicationCreator>
    <situation id="hu_UTINFORM_4421296" version="2">
      <situationVersionTime>2022-03-08T14:41:48+01:00</situationVersionTime>
      <headerInformation>
        <confidentiality>noRestriction</confidentiality>
        <informationStatus>real</informationStatus>
        <urgency>urgent</urgency>
      </headerInformation>
      <situationRecord xsi:type="ConstructionWorks" id="hu_UTINFORM_4421296_1" version="2">
        <situationRecordCreationReference>IVDS</situationRecordCreationReference>
        <situationRecordCreationTime>2022-03-07T14:34:19+01:00</situationRecordCreationTime>
        <situationRecordVersionTime>2022-03-08T14:41:48+01:00</situationRecordVersionTime>
        <probabilityOfOccurrence>certain</probabilityOfOccurrence>
        <source>
          <sourceCountry>hu</sourceCountry>
          <sourceIdentification>Útinform</sourceIdentification>
          <sourceName>
            <values>
              <value lang="hu">VÁCI mérnökség</value>
            </values>
          </sourceName>
          <reliable>true</reliable>
        </source>
        <validity>
          <validityStatus>definedByValidityTimeSpec</validityStatus>
        </validity>
      </situationRecord>
    </situation>
  </payloadPublication>
</d2LogicalModel>
```

```
<validityTimeSpecification>
  <overallStartTime>2022-03-07T08:30:00+01:00</overallStartTime>
  <overallEndTime>2022-03-09T15:30:00+01:00</overallEndTime>
</validityTimeSpecification>
</validity>
<impact>
  <capacityRemaining>75.0</capacityRemaining>
  <numberOfLanesRestricted>1</numberOfLanesRestricted>
  <numberOfOperationalLanes>3</numberOfOperationalLanes>
  <originalNumberOfLanes>4</originalNumberOfLanes>
</impact>
<groupOfLocations xsi:type="Linear">
  <groupOfLocationsExtension/>
  <locationForDisplay>
    <latitude>47.78002</latitude>
    <longitude>19.131823</longitude>
  </locationForDisplay>
  <linearWithinLinearElement>
    <directionRelativeOnLinearSection>both</directionRelativeOnLinearSection>
    <linearElement xsi:type="LinearElementByPoints">
      <roadName>
        <values>
          <value lang="hu">2</value>
        </values>
      </roadName>
      <roadNumber>2</roadNumber>
      <linearElementReferenceModel>DSM-10</linearElementReferenceModel>
      <linearElementReferenceModelVersion>1</linearElementReferenceModelVersion>
      <linearElementNature>road</linearElementNature>
      <startPointOfLinearElement>
        <referentIdentifier>34</referentIdentifier>
        <referentType>referenceMarker</referentType>
        <pointCoordinates>
          <latitude>47.78002</latitude>
          <longitude>19.131823</longitude>
        </pointCoordinates>
      </startPointOfLinearElement>
      <endPointOfLinearElement>
        <referentIdentifier>34</referentIdentifier>
        <referentType>referenceMarker</referentType>
        <pointCoordinates>
          <latitude>47.780464</latitude>
          <longitude>19.130695</longitude>
        </pointCoordinates>
      </endPointOfLinearElement>
    </linearElement>
    <fromPoint xsi:type="DistanceFromLinearElementReferent">
      <distanceAlong>700.0</distanceAlong>
      <fromReferent>
        <referentIdentifier>34</referentIdentifier>
        <referentType>referenceMarker</referentType>
        <pointCoordinates>
          <latitude>47.78002</latitude>
          <longitude>19.131823</longitude>
        </pointCoordinates>
      </fromReferent>
    </fromPoint>
    <toPoint xsi:type="DistanceFromLinearElementReferent">
      <distanceAlong>800.0</distanceAlong>
```

```

        <fromReferent>
            <referentIdentifier>34</referentIdentifier>
            <referentType>referenceMarker</referentType>
            <pointCoordinates>
                <latitude>47.780464</latitude>
                <longitude>19.130695</longitude>
            </pointCoordinates>
        </fromReferent>
    </toPoint>
</linearWithinLinearElement>
<linearExtension>
    <openlrExtendedLinear>
        <firstDirection>
            <openlrLocationReferencePoint>
                <openlrCoordinate>
                    <latitude>47.76459</latitude>
                    <longitude>19.14033</longitude>
                </openlrCoordinate>
                <openlrLineAttributes>
                    <openlrFunctionalRoadClass>FRC1</openlrFunctionalRoadClass>
                    <openlrFormOfWay>singleCarriageway</openlrFormOfWay>
                    <openlrBearing>354</openlrBearing>
                </openlrLineAttributes>
                <openlrPathAttributes>
                    <openlrLowestFRCToNextLRPoint>FRC1</openlrLowestFRCToNextLRPoint>
                    <openlrDistanceToNextLRPoint>2504</openlrDistanceToNextLRPoint>
                </openlrPathAttributes>
            </openlrLocationReferencePoint>
            <openlrLastLocationReferencePoint>
                <openlrCoordinate>
                    <latitude>47.78238</latitude>
                    <longitude>19.12542</longitude>
                </openlrCoordinate>
                <openlrLineAttributes>
                    <openlrFunctionalRoadClass>FRC1</openlrFunctionalRoadClass>
                    <openlrFormOfWay>singleCarriageway</openlrFormOfWay>
                    <openlrBearing>132</openlrBearing>
                </openlrLineAttributes>
            </openlrLastLocationReferencePoint>
            <openlrOffsets>
                <openlrPositiveOffset>1953</openlrPositiveOffset>
                <openlrNegativeOffset>451</openlrNegativeOffset>
            </openlrOffsets>
        </firstDirection>
    </openlrExtendedLinear>
</linearExtension>
</groupOfLocations>
<mobility>
    <mobilityType>stationary</mobilityType>
</mobility>
<subjects>
    <subjectTypeOfWorks>waterMain</subjectTypeOfWorks>
</subjects>
    <constructionWorkType>constructionWork</constructionWorkType>
</situationRecord>
</situation>
</payloadPublication>
</d2LogicalModel>

```

**Code listing 1: General structure of an 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 contain more detailed data concerning their location, schedule, lane restrictions, and temporary speed limits. The Roadworks events are represented in one situation with several situation records.

The roadwork events contain the following data:

- Spatial extent of construction/maintenance zones is provided using WGS84 coordinates and OpenLR location codes. The location referencing methods used are described in Section A.4.
- Start times and end times of the events (not detailed with recurring periods).
- Number of blocked and operational lanes as well as contraflow area of the construction zone.
- The *mobility* element describes the nature of the roadwork. It can be a stationary or a mobile roadwork.
- An Extension (mkMaintenanceWorksExtension) and “subject” class provide more details about the roadwork.

Figure 1 shows a DATEX II feed for roadwork events published by Magyar Közút. Due to the length of the complete feed, the example is divided into parts to show relevant sections. The complete example is available in the zip package.

```
<d2LogicalModel modelBaseVersion="2" xmlns="http://datex2.eu/schema/2/2_0">
  <exchange>
    <supplierIdentification>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="SituationPublication" lang="hu" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <publicationTime>2022-03-08T16:22:05+01:00</publicationTime>
    <publicationCreator>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </publicationCreator>
    <situation id="hu_UTINFORM_4421296" version="2">
      <situationVersionTime>2022-03-08T14:41:48+01:00</situationVersionTime>
      <headerInformation>
        <confidentiality>noRestriction</confidentiality>
        <informationStatus>real</informationStatus>
        <urgency>urgent</urgency>
      </headerInformation>
      <situationRecord xsi:type="ConstructionWorks" id="hu_UTINFORM_4421296_1" version="2">
      <situationRecord xsi:type="RoadOrCarriagewayOrLaneManagement" id="hu_UTINFORM_4421296_2" version="2">
      <situationRecord xsi:type="GeneralNetworkManagement" id="hu_UTINFORM_4421296_3" version="2">
      <situationRecord xsi:type="SpeedManagement" id="hu_UTINFORM_4421296_4" version="2">
    </situation>
  </payloadPublication>
</d2LogicalModel>
```

**Figure 1: Roadwork data feed in DATEX II published by Magyar Közút**

Each *situation record* element represents an information about the roadwork or the network management action carried out by Magyar Közút. The actual information is contained in a number of *situationRecord* elements as shown in Figure 1. The attribute *type* indicates the type of roadwork.

The *situationRecordCreationTime* contains the create-timestamp of the roadwork entry (version 1) and the *situationRecordVersionTime* contains the create-timestamp of the current version.

```

<situationRecord xsi:type="MaintenanceWorks" id="hu_UTINFORM_4421372_1" version="1">
  <situationRecordCreationReference>IVDS</situationRecordCreationReference>
  <situationRecordCreationTime>2022-03-08T07:33:20+01:00</situationRecordCreationTime>
  <situationRecordVersionTime>2022-03-08T07:33:20+01:00</situationRecordVersionTime>
  <probabilityOfOccurrence>certain</probabilityOfOccurrence>
  <source>
    <sourceCountry>hu</sourceCountry>
    <sourceIdentification>Útinform</sourceIdentification>
    <sourceName>
      <values>
        <value lang="hu">SZÉKESFEHÉRVÁRI mérnökség</value>
      </values>
    </sourceName>
    <reliable>>true</reliable>
  </source>
  <validity>
    <validityStatus>definedByValidityTimeSpec</validityStatus>
    <validityTimeSpecification>
      <overallStartTime>2022-03-08T08:00:00+01:00</overallStartTime>
      <overallEndTime>2022-03-08T14:30:00+01:00</overallEndTime>
    </validityTimeSpecification>
  </validity>
  <impact>
    <capacityRemaining>50.0</capacityRemaining>
    <numberOfLanesRestricted>1</numberOfLanesRestricted>
    <numberOfOperationalLanes>1</numberOfOperationalLanes>
    <originalNumberOfLanes>2</originalNumberOfLanes>
  </impact>
  <groupOfLocations xsi:type="Linear">
    <groupOfLocationsExtension/>
    <locationForDisplay>


---


      <supplementaryPositionalDescription>
        <affectedCarriagewayAndLanes>
          <carriageway>mainCarriageway</carriageway>
          <lane>lane1</lane>
        </affectedCarriagewayAndLanes>
      </supplementaryPositionalDescription>


---


      <linearWithinLinearElement>


---


        <linearExtension>


---


      </linearExtension>
    </groupOfLocations>
    <roadMaintenanceType>roadsideWork</roadMaintenanceType>
    <maintenanceWorksExtension>
      <mkMaintenanceWorks>
        <limitationType>drainAndVergeMaintenance</limitationType>
      </mkMaintenanceWorks>
    </maintenanceWorksExtension>
  </situationRecord>

```

**Figure 2: Example of a situationRecord (shown without location referencing elements)**

The source contains the name of the maintenance center (in Hungarian language) which is responsible for the event.

The *validityTimeSpecification* contains the time period of the roadwork that starts at 2022-03-08 08:00:00 (element *overallStartTime*) and ends at 2022-03-08 14:30:00 (element *overallEndTime*). If the event reaches the *overallEndTime* or the event is finished before the end time given, it disappears from the data flow.

The *impact* element in *Figure 4* contains information about lane and carriageway restrictions. A value is given to the remaining capacity – it is a predefined value for different types of network managements. It also includes information

about the number of restricted/operational lanes (with *numberOfLanesRestricted*, *numberOfOperationalLanes*, *originalNumberOfLanes*) and about the exact lane itself (with *affectedCarriageWayAndLanes* element at *groupOfLocations*).

```
<d2LogicalModel modelBaseVersion="2" xmlns="http://datex2.eu/schema/2/2_0">
  <exchange>
    <supplierIdentification>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </supplierIdentification>
  </exchange>
  <payloadPublication xsi:type="SituationPublication" lang="hu" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <publicationTime>2022-03-08T16:22:05+01:00</publicationTime>
    <publicationCreator>
      <country>hu</country>
      <nationalIdentifier>UTINFORM-2</nationalIdentifier>
    </publicationCreator>
    <situation id="hu UTINFORM 4421296" version="2">
      <situationVersionTime>2022-03-08T14:41:48+01:00</situationVersionTime>
      <headerInformation>
        <confidentiality>noRestriction</confidentiality>
        <informationStatus>real</informationStatus>
        <urgency>urgent</urgency>
      </headerInformation>
      <situationRecord xsi:type="ConstructionWorks" id="hu UTINFORM 4421296 1" version="2">
      </situationRecord>
      <situationRecord xsi:type="RoadOrCarriagewayOrLaneManagement" id="hu UTINFORM 4421296 2" version="2">
      </situationRecord>
      <situationRecord xsi:type="GeneralNetworkManagement" id="hu UTINFORM 4421296 3" version="2">
      </situationRecord>
      <situationRecord xsi:type="SpeedManagement" id="hu UTINFORM 4421296 4" version="2">
      </situationRecord>
    </situation>
  </payloadPublication>
</d2LogicalModel>
```

**Figure 3: Network management SituationRecords**

The *RoadOrCarriagewayOrLaneManagement* record is only used for planned events, when a network management action is carried out by Magyar Közút, for example lane closures and contraflow traffic. The *GeneralNetworkManagement* record describes which device/who is responsible for the traffic diversion. It can be police officers, traffic signal technicians, traffic signals or Variable Message Signs (VMS). *SpeedManagement* is usually applied at motorways when traffic is diverted. The exact value of the speed restriction is given in the *temporarySpeedLimit* element. Note: as the roadwork is not divided into several sections, the speed limit value is the lowest value of the whole restriction. For example, there is a 5 km long asphalt milling work. If there is a 60 km/h speed limit in the middle of the section, but the other 3 km long section has 80-110 km/h speed limits, the 60 km/h is given as the temporary speed limit.

**A.4 Location Referencing**

Under the umbrella of the Easyway project, out of the available DATEX options, Magyar Közút has chosen the road number and cross-section based positioning to be included in the events sent in DATEX. An explanation for using the *groupOfLocation* DATEX element in this form of geocoding can be seen below, based on the DATEX standard.

A reference system providing linear positioning is one of the positioning methods provided by DATEX. It is based on the road number and cross-section.

- Linear element (*linearElement*)

The geometric element on which geocoding is needed. The position is defined by the two endpoints and optional intermediate points. These must be recognizable by data service users. This can be a whole road (*linearElementNature=road*), a road segment just as in the case of Magyar Közút (*linearElementNature=roadSection*), or a slip road (*linearElementNature=slipRoad*). The linear element can be defined by kilometer markers, or marked slip roads, junctions. Magyar Közút defines road segments as linear elements and uses kilometer markers as reference points. Road numbers and road names must be given in the fields *roadNumber* and *roadName*.



- Points of the linear element - *startPointOfLinearElement*, *endPointOfLinearElement*

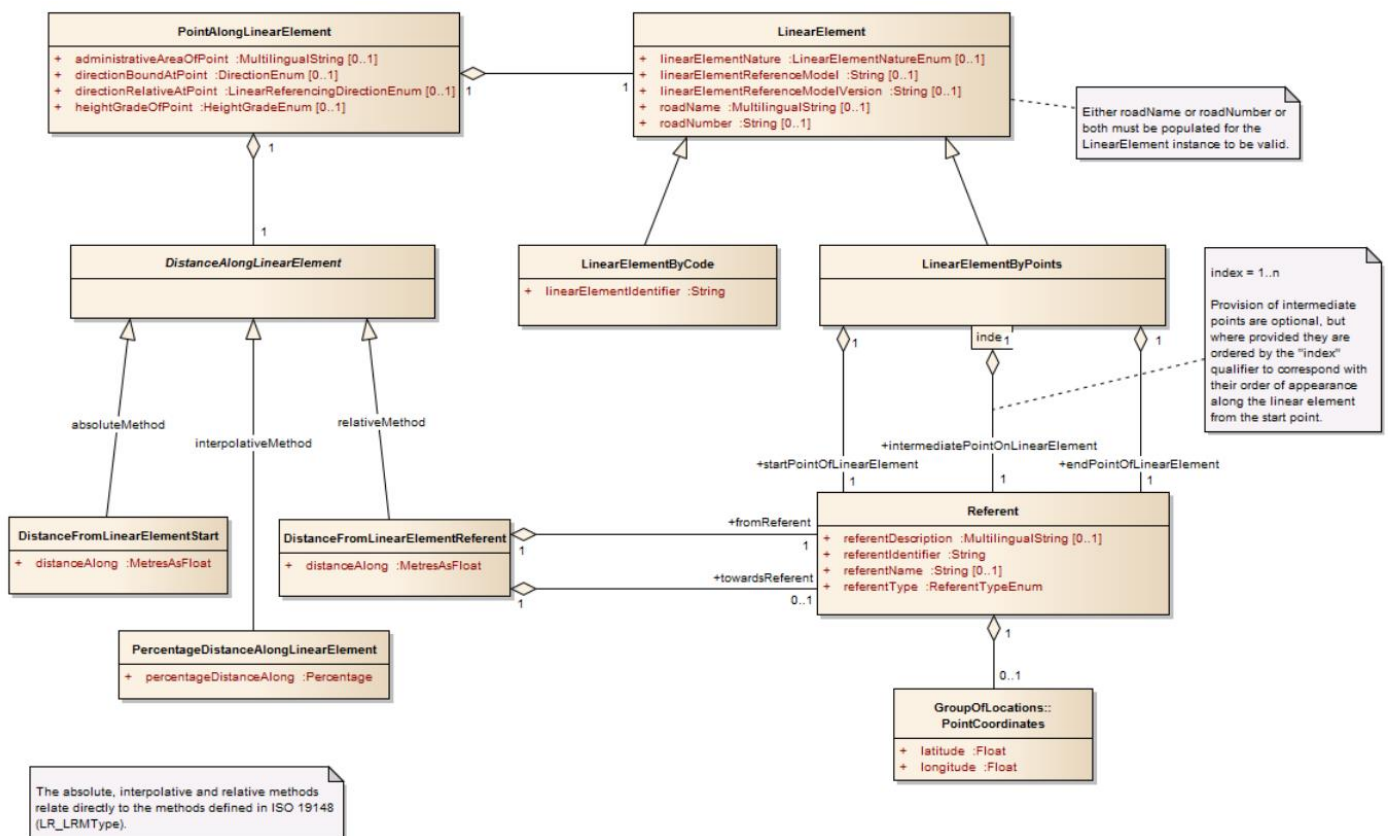
A linear element is defined by its points that are endpoints (*startPointOfLinearElement*, *endPointOfLinearElement*). Every point has a referent identifier (*referentIdentifier*) and type (*referentType*). Kilometer markers are assigned to the *referenceMarker* type. The standard defines the *referenceMarker* as follows: 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. It is also possible to give further description and name to the referent (*referentDescription*, *referentName*).

- Localizing events along linear elements - *pointAlongLinearElement*, *linearWithinLinearElement*

Events can be points (e.g. an accident) or spread across a road segment (e.g. traffic congestion, roadworks). Point events along a linear element (*linearElement*) are defined by one point (*pointAlongLinearElement*) and the distance from one of the points (*referentIdentifier*) on the linear element (*DistanceFromLinearElementReferent:distanceAlong*). In case of Magyar Közút, the linear element is a starting and ending kilometer marker. The positioning of the event is calculated from the starting kilometer marker.

Events that spread along the road are defined by two endpoints (*linearWithinLinearElement*) along the linear element (*linearElement*). The starting point is defined by the distance from one of the points of the linear element. The endpoint is similar with another point of the linear element. In the case of Magyar Közút, these are the starting and ending kilometer markers.

The figure below depicts the UML model of this kind of localization:



Next, the point events and spread events along a previously defined linear element (*linearElement*) are presented. In the first case, the type of the geolocation is *pointAlongLinearElement* and the linear element is represented by two points.

In the second case, the type is *linearWithinLinearElement* and represented by three points. The representation at Magyar Közút lacks the third point, but this does not influence the processing substantially.

In the case of point events, geolocation elements are defined as follows, considering the numbers and directions on the figure.

### Example for point location

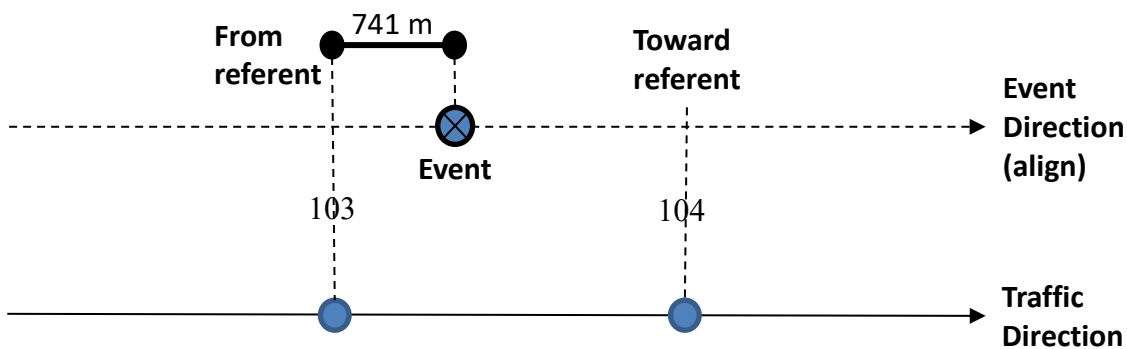
Kilometer marker given (from the Dispatch System): 103+741

Points of the linear element - *startPointOfLinearElement* = 103, *endPointOfLinearElement*=104

Location of event (head): *LinearElementReferent*=103 *distanceAlong*=741

Direction of event: aligned

The optional *towardReferent* can be defined to give further details of the direction. This is 104 in case of “aligned”/”both” and 103 in case of “opposite” direction.



The DATEX representation is as follows, without the coordinates:

```

<groupOfLocations xsi:type="Point">
  <pointAlongLinearElement>
    <directionRelativeAtPoint>aligned</directionRelativeAtPoint>
    <linearElement xsi:type="LinearElementByPoints">
      <roadName>
        <values>
          <value lang="hu">M1 Budapest-Hegyeshalom</value>
        </values>
      </roadName>
      <roadNumber>M1</roadNumber>
      <linearElementReferenceModel>OKA</linearElementReferenceModel>
      <linearElementReferenceModelVersion>1</linearElementReferenceModelVersion>
      <linearElementNature>roadSection</linearElementNature>
      <startPointOfLinearElement>
        <referentIdentifier>103</referentIdentifier>
        <referentType>referenceMarker</referentType>
      </startPointOfLinearElement>
      <endPointOfLinearElement>
        <referentIdentifier>104</referentIdentifier>
        <referentType>referenceMarker</referentType>
      </endPointOfLinearElement>
    </linearElement>
    <distanceAlongLinearElement xsi:type="DistanceFromLinearElementReferent">
      <fromReferent>
        <referentIdentifier>103</referentIdentifier>
        <referentType>referenceMarker</referentType>
        <distanceAlong>741</distanceAlong>
      </fromReferent>
    </distanceAlongLinearElement>
  </pointAlongLinearElement>
</groupOfLocations>

```

```

    <towardReferent>
      <referentIdentifier>104</referentIdentifier>
      <referentType>referenceMarker</referentType>
    </towardReferent>
  </distanceAlongLinearElement>
</pointAlongLinearElement>

```

### Example for linear location

In the case of spread events, geolocation elements are defined as follows, considering the numbers and directions on the figure.

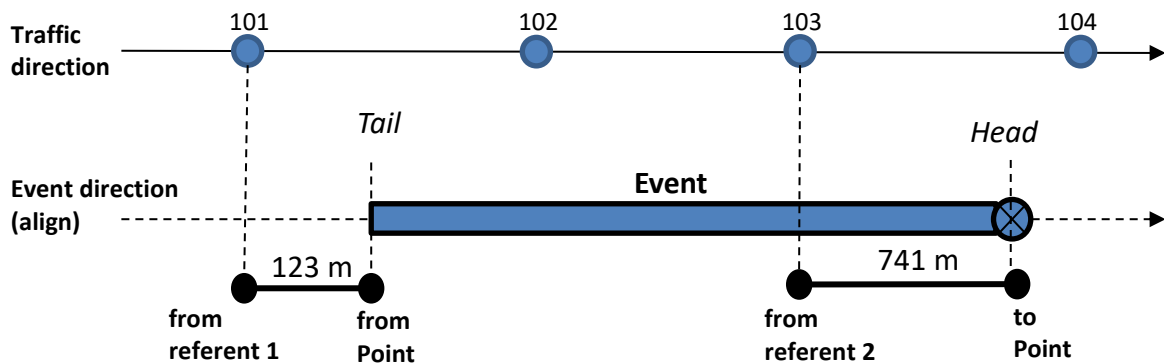
Kilometer markers given (from the Dispatch System): 101+123 and 103+741

Points of the linear element - *startPointOfLinearElement* = 101, *endPointOfLinearElement* = 104

Start of event (head): *LinearElementReferent*=103 *distanceAlong*=741

End of event (tail): *LinearElementReferent*=101 *distanceAlong*=123

Direction of event: aligned



The DATEX representation is as follows, without the coordinates:

```

<groupOfLocations xsi:type="Linear">
  <linearWithinLinearElement>
    <directionRelativeOnLinearSection>opposite</directionRelativeOnLinearSection>
    <linearElement xsi:type="LinearElementByPoints">
      <roadName>
        <values>
          <value lang="hu">32 Hatvan-Szolnok</value>
        </values>
      </roadName>
      <roadNumber>32</roadNumber>
      <linearElementReferenceModel>DSM-10</linearElementReferenceModel>
      <linearElementReferenceModelVersion>1</linearElementReferenceModelVersion>
      <linearElementNature>roadSection</linearElementNature>
      <startPointOfLinearElement>
        <referentIdentifier>101</referentIdentifier>
        <referentType>referenceMarker</referentType>
      </startPointOfLinearElement>
      <endPointOfLinearElement>
        <referentIdentifier>104</referentIdentifier>
        <referentType>referenceMarker</referentType>
      </endPointOfLinearElement>
    </linearElement>
  </linearWithinLinearElement>
</groupOfLocations>

```

```
        </endPointOfLinearElement>
    </linearElement>
    <fromPoint xsi:type="DistanceFromLinearElementReferent">
        <distanceAlong>123</distanceAlong>
        <fromReferent>
            <referentIdentifier>101</referentIdentifier>
            <referentType>referenceMarker</referentType>
        </fromReferent>
    </fromPoint>
    <toPoint xsi:type="DistanceFromLinearElementReferent">
        <distanceAlong>741</distanceAlong>
        <fromReferent>
            <referentIdentifier>103</referentIdentifier>
            <referentType>referenceMarker</referentType>
        </fromReferent>
    </toPoint>
</linearWithinLinearElement>
</groupOfLocations>
```

If the direction of the event changes to “opposite”, *fromPoint* and *toPoint* values are **not swapped** in the location above, the order of the coordinates is the same. An example is given in the zip file. It contains an event which affects the right carriageway on motorway M7 from the 100 km marker to the 102 km marker, and an event which affects the left carriageway on the same motorway on the same section.

In the future, point location codes will be assigned to accident type events exclusively. Linear location codes will be used in case of all other event types.

## A.5 Data Dictionary for "Hungarian Event Profile"

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

### A.5.1 "Accident" package

#### A.5.1.1 "Accident" package classes

Class name	Designation	Definition	Stereotype	Abstract
Accident	Accident	Accidents are events where one or more vehicles are involved in collisions or in leaving the roadway. These include collisions between vehicles or with other road users or obstacles.		no

Table 1— Classes of the "Accident" package

#### A.5.1.2 "Accident" package association roles

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

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

#### A.5.1.3 "Accident" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Accident	accidentCause	Accident cause	A descriptor indicating the most significant factor causing an accident.	0..1	AccidentCauseEnum
	accidentType	Accident type	A characterization of the nature of the accident.	1..*	AccidentTypeEnum

Table 3— Attributes of the "Accident" package

## A.5.2 "Activity" package

### A.5.2.1 "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.		yes
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 4— Classes of the "Activity" package

### A.5.2.2 "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 5— Associations of the "Activity" package

### A.5.2.3 "Activity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
DisturbanceActivity	disturbanceActivityType	Disturbance activity type	Includes all situations of a public disorder type or of an alert type, with potential to disrupt traffic.	1..1	DisturbanceActivityTypeEnum
PublicEvent	publicEventType	Public event type	Type of public event which could disrupt traffic.	1..1	PublicEventTypeEnum

Table 6— Attributes of the "Activity" package

### A.5.3 "AlertCMethod2Linear" package

#### A.5.3.1 "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 7— Classes of the "AlertCMethod2Linear" package

#### A.5.3.2 "AlertCMethod2Linear" package association roles

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

#### A.5.3.3 "AlertCMethod2Linear" package attributes

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

### A.5.4 "AlertCMethod2Point" package

#### A.5.4.1 "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 8— Classes of the "AlertCMethod2Point" package

#### A.5.4.2 "AlertCMethod2Point" package association roles

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

#### A.5.4.3 "AlertCMethod2Point" package attributes

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

## A.5.5 "AlertCMethod4Linear" package

### A.5.5.1 "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.		no

Table 9— Classes of the "AlertCMethod4Linear" package

### A.5.5.2 "AlertCMethod4Linear" package association roles

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

### A.5.5.3 "AlertCMethod4Linear" package attributes

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

## A.5.6 "AlertCMethod4Point" package

### A.5.6.1 "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 10— Classes of the "AlertCMethod4Point" package

### A.5.6.2 "AlertCMethod4Point" package association roles

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

### A.5.6.3 "AlertCMethod4Point" package attributes

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



## A.5.7 "Conditions" package

### A.5.7.1 "Conditions" package classes

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

Table 11— Classes of the "Conditions" package

### A.5.7.2 "Conditions" package association roles

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

### A.5.7.3 "Conditions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Conditions	drivingConditionType	Driving condition type	Description of the driving conditions at the specified location.	0..1	DrivingConditionTypeEnum

Table 12— Attributes of the "Conditions" package

## A.5.8 "Exchange" package

### A.5.8.1 "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 13— Classes of the "Exchange" package

### A.5.8.2 "Exchange" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
Exchange	supplierIdentification	Supplier identification		1..1	InternationalIdentifier

Table 14— Associations of the "Exchange" package

### A.5.8.3 "Exchange" package attributes

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

Class name	Attribute name	Designation	Definition	Multiplicity	Type
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Table 15— Attributes of the "Exchange" package

### A.5.9 "GroupOfLocationExtensions" package

#### A.5.9.1 "GroupOfLocationExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
GroupOfLocationsExtended	Group of locations extended	Extensions for GroupOfLocations to provide additional information relevant to the Hungarian Events Profile.		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.5.9.2 "GroupOfLocationExtensions" package association roles

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

### A.5.9.3 "GroupOfLocationExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
LocationInfo	country	Country	Country where the event lies. The info is important for the exchange of messages with neighboring countries or for the import of messages from neighbouring countries	1..1	CountryEnum
	locationName	Location name	Location name if the event location is not on any street. Eg: on a POI.	0..1	MultilingualString
	locationText	Location text	Free text for the location: eg. A23 Klagenfurt West, St.Veit at the Glan city center.	0..1	MultilingualString
	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	1..1	MultilingualString
	roadNumber	Road number	Road number	0..1	String
	roadOperator	Road operator	Name of the responsible road operator for this road	1..1	String
	roadSection	Road section	Specification of the road sections	0..*	String

Table 17— Attributes of the "GroupOfLocationExtensions" package

### A.5.10 "GroupOfLocations" package

#### A.5.10.1 "GroupOfLocations" package classes

Class name	Designation	Definition	Stereotype	Abstract
AffectedCarriagewayAndLanes	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
AlertCMethod2PrimaryPointLocation	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
AlertCMethod2SecondaryPointLocation	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
AlertCMethod4PrimaryPointLocation	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.		no
AlertCMethod4SecondaryPointLocation	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
ItineraryByIndexedLocations	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
SupplementaryPositionalDescription	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.5.10.2 "GroupOfLocations" package association roles**

Class name	Role name	Designation	Definition	Multiplicity	Target
ItineraryByIndexedLocations	locationContainedInItinerary	Location contained in itinerary	A location contained in an itinerary (i.e. an ordered set of locations defining a route or itinerary).	1..1	Location
Location	locationForDisplay	Location for display	A location which may be used by clients for visual display on user interfaces.	0..1	PointCoordinates

**Table 19— Associations of the "GroupOfLocations" package**

**A.5.10.3 "GroupOfLocations" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
AffectedCarriagewayAndLanes	carriageway	Carriageway	Indicates the section of carriageway to which the location relates.	1..1	CarriagewayEnum
	footpath	Footpath	Indicates whether the pedestrian footpath is the subject or part of the subject of the location. (True = footpath is subject)	0..1	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.	0..1	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.	1..1	AlertCDirectionEnum
	alertCDirectionNamed	ALERT-C direction named	ALERT-C name of a direction e.g. Brussels -> Lille.	0..1	MultilingualString
	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.	0..1	Boolean
AlertCLocation	alertCLocationName	ALERT-C location name	Name of ALERT-C location.	0..1	MultilingualString
	specificLocation	Specific location	Unique code within the ALERT-C location table which identifies the specific point, linear or area location.	1..1	AlertCLocationCode
LocationByReference	predefinedLocationReference	Predefined location reference	A reference to a versioned predefined location. Note: It is only used for PoorEnvironmentConditions.	1..1	VersionedReference

Class name	Attribute name	Designation	Definition	Multiplicity	Type
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.	1..1	MetresAsNonNegativeInteger
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).	1..1	Float
SupplementaryPositionalDescription	locationDescriptor	Location descriptor	Specifies a descriptor which helps to identify the specific location.	0..*	LocationDescriptorEnum
	locationPrecision	Location precision	Indicates that the location is given with a precision which is better than the stated value in metres.	0..1	MetresAsNonNegativeInteger
	sequentialRampNumber	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).	0..1	NonNegativeInteger

Table 20— Attributes of the "GroupOfLocations" package

## A.5.11 "Impact" package

### A.5.11.1 "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
Impact	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.5.11.2 "Impact" package association roles**

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

### **A.5.11.3 "Impact" package attributes**



Class name	Attribute name	Designation	Definition	Multiplicity	Type
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".	0..1	DelayBandEnum
	delaysType	Delays type	Coarse classification of the delay.	0..1	DelaysTypeEnum
	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.	0..1	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.	0..1	Percentage
	numberOfLanesRestricted	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).	0..1	NonNegativeInteger
	numberOfOperationalLanes	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).	0..1	NonNegativeInteger
	originalNumberOfLanes	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.	0..1	NonNegativeInteger
	residualRoadWidth	Residual road width	The total width of the combined operational lanes in the specified direction.	0..1	MetresAsFloat
	trafficConstrictionType	Traffic constriction type	The type of constriction to which traffic is subjected as a result of an event or operator action.	0..1	TrafficConstrictionTypeEnum

**Table 22— Attributes of the "Impact" package**

**A.5.12 "Linear" package**

**A.5.12.1 "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.5.12.2 "Linear" package association roles**

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

**A.5.12.3 "Linear" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
AlertCLinear	alertCLocationCountry Code	ALERT-C location country code	EBU country code.	1..1	String
	alertCLocationTableNumber	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.	1..1	String
	alertCLocationTableVersion	ALERT-C location table version	Version number associated with an ALERT-C table reference.	1..1	String

**Table 24— Attributes of the "Linear" package**

**A.5.13 "LinearByCoordinates" package**

**A.5.13.1 "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.5.13.2 "LinearByCoordinates" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
LinearByCoordinates	end	End	End point of a LinearByCoordinates	1..1	PointCoordinates
	intermediate	Intermediate	Points of a LinearByCoordinates object that are neither start or end point.	1..1	PointCoordinates
	start	Start	Start point of a LinearByCoordinates	1..1	PointCoordinates

Table 26— Associations of the "LinearByCoordinates" package

### A.5.13.3 "LinearByCoordinates" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
LinearByCoordinates	directed	Directed	Whether this linear is directed or not. Default is directed=true	0..1	Boolean
	roadName	Road name	Name of the road of which the linear element forms a part.	0..1	MultilingualString
	roadNumber	Road number	Identifier/number of the road of which the linear element forms a part.	0..1	String

Table 27— Attributes of the "LinearByCoordinates" package

## A.5.14 "LinearWithinLinearElement" package

### A.5.14.1 "LinearWithinLinearElement" package classes

Class name	Designation	Definition	Stereotype	Abstract
LinearWithinLinearElement	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.5.14.2 "LinearWithinLinearElement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
LinearWithinLinearElement	fromPoint	From point	A point on the linear element that defines the start node of the linear section.	1..1	DistanceAlongLinearElement
	toPoint	To point	A point on the linear element that defines the end node of the linear section.	1..1	DistanceAlongLinearElement

Table 29— Associations of the "LinearWithinLinearElement" package

#### A.5.14.3 "LinearWithinLinearElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
LinearWithinLinearElement	administrativeAreaOfLinearSection	Administrative area of linear section	Identification of the road administration area which contains the specified linear section.	0..1	MultilingualString
	directionBoundOnLinearSection	Direction bound on linear section	The direction of traffic flow on the linear section in terms of general destination direction.	0..1	DirectionEnum
	directionRelativeOnLinearSection	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.	0..1	LinearReferencingDirectionEnum
	heightGradeOfLinearSection	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.	0..1	HeightGradeEnum

Table 30— Attributes of the "LinearWithinLinearElement" package

## A.5.15 "Management" package

### A.5.15.1 "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.5.15.2 "Management" package association roles

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

### A.5.15.3 "Management" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
LifeCycleManagement	cancel	Cancel	Indication that all the element information previously sent is not considered valid, due to an incorrect content.	0..1	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.	0..1	Boolean

**Table 32— Attributes of the "Management" package**

## A.5.16 "NetworkManagement" package

### A.5.16.1 "NetworkManagement" package classes

Class name	Designation	Definition	Stereotype	Abstract
GeneralInstructionOrMessageToRoadUsers	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
GeneralNetworkManagement	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
RoadOrCarriagewayOrLaneManagement	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
WinterDrivingManagement	Winter driving management	Winter driving management action that is instigated by the network/road operator.		no

Table 33— Classes of the "NetworkManagement" package

### A.5.16.2 "NetworkManagement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
NetworkManagement	forVehiclesWithCharacteristicsOf	For vehicles with characteristics of	The characteristics of those vehicles for which the network management is applicable.	0..*	VehicleCharacteristics

Table 34— Associations of the "NetworkManagement" package

### A.5.16.3 "NetworkManagement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GeneralInstructionOrMessageToRoadUsers	generalInstructionToRoadUsersType	General instruction to road users type	General instruction that is issued by the network/road operator which is applicable to drivers and sometimes passengers.	0..1	GeneralInstructionToRoadUsersTypeEnum
	generalMessageToRoadUsers	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).	0..1	MultilingualString
GeneralNetworkManagement	generalNetworkManagementType	General network management type	The type of traffic management action instigated by the network/road operator.	1..1	GeneralNetworkManagementTypeEnum
	trafficManuallyDirectedBy	Traffic manually directed by	Type of person that is manually directing traffic (applicable if generalNetworkManagementType is set to "trafficBeingManuallyDirected").	0..1	PersonCategoryEnum
NetworkManagement	applicableForTrafficDirection	Applicable for traffic direction	The ultimate traffic direction to which the network management is applicable.	0..*	DirectionEnum
	applicableForTrafficType	Applicable for traffic type	The type of traffic to which the network management is applicable.	0..*	TrafficTypeEnum
	automaticallyInitiated	Automatically initiated	Defines whether the network management is initiated by an automatic system.	0..1	Boolean
	complianceOption	Compliance option	Defines whether the network management instruction or the control resulting from a network management action is advisory or mandatory.	1..1	ComplianceOptionEnum
	placesAtWhichApplicable	Places at which applicable	Places, in generic terms, at which the network management applies.	0..*	PlacesEnum
ReroutingManagement	reroutingItineraryDescription	Rerouting itinerary description	A description of the rerouting itinerary.	0..1	MultilingualString
	reroutingManagementType	Rerouting management type	Type of rerouting management action instigated by operator.	1..*	ReroutingManagementTypeEnum
RoadOrCarriagewayOrLaneManagement	minimumCarOccupancy	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.	0..1	NonNegativeInteger

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	roadOrCarriagewayOrLaneManagementType	Road or carriageway or lane management type	Type of road, carriageway or lane management action instigated by operator.	1..1	RoadOrCarriagewayOrLaneManagementTypeEnum
SpeedManagement	speedManagementType	Speed management type	Type of speed management action instigated by operator.	0..1	SpeedManagementTypeEnum
	temporarySpeedLimit	Temporary speed limit	Temporary limit defining the maximum advisory or mandatory speed of vehicles.	0..1	KilometresPerHour
WinterDrivingManagement	winterEquipmentManagementType	Winter equipment management type	Type of winter equipment management action instigated by operator.	1..1	WinterEquipmentManagementTypeEnum

Table 35— Attributes of the "NetworkManagement" package

#### A.5.17 "NonRoadEventInformation" package

##### A.5.17.1 "NonRoadEventInformation" package classes

Class name	Designation	Definition	Stereotype	Abstract
CarParks	Car parks	Provides information on the status of one or more car parks.		no
NonRoadEventInformation	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.5.17.2 "NonRoadEventInformation" package association roles

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

##### A.5.17.3 "NonRoadEventInformation" package attributes



Class name	Attribute name	Designation	Definition	Multiplicity	Type
CarParks	carParkIdentity	Car park identity	The identity of one or a group of car parks.	1..1	String
	carParkStatus	Car park status	Indicates the status of one or more specified car parks.	0..1	CarParkStatusEnum

Table 37— Attributes of the "NonRoadEventInformation" package

## A.5.18 "Obstruction" package

### A.5.18.1 "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.5.18.2 "Obstruction" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
Obstruction	mobilityOfObstruction	Mobility of obstruction	The mobility of the obstruction.	0..1	Mobility
VehicleObstruction	obstructingVehicle	Obstructing vehicle	The obstructing vehicle.	0..*	Vehicle

Table 39— Associations of the "Obstruction" package

### A.5.18.3 "Obstruction" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GeneralObstruction	obstructionType	Obstruction type	Characterization of the type of general obstruction.	1..*	ObstructionTypeEnum
Obstruction	numberOfObstructions	Number of obstructions	The number of obstructions that are partly or wholly blocking the road.	0..1	NonNegativeInteger
VehicleObstruction	vehicleObstructionType	Vehicle obstruction type	Characterization of an obstruction on the road caused by one or more vehicles.	1..1	VehicleObstructionTypeEnum

Table 40— Attributes of the "Obstruction" package

### A.5.19 "OpenLRExtension" package

#### A.5.19.1 "OpenLRExtension" package classes

Class name	Designation	Definition	Stereotype	Abstract
OpenlrAreaLocationReference	Openlr area location reference	a two-dimensional part of the surface of the earth which is bounded by a closed curve. An area location may cover parts of the road network but does not necessarily need to. It is represented according to the OpenLR standard for Area Locations		no
OpenlrBaseLocationReferencePoint	Openlr base location reference point	Base class used to hold data about a reference point.		yes
OpenlrBasePointLocation	Openlr base point location	Holds common data that are used both in OpenlrPointAccessPoint and OpenlrPointAlongLine.		yes
OpenlrCircleLocationReference	Openlr circle location reference	the openLR method of areadefinition by providing a center position and a radius		no
OpenlrClosedLineLocationReference	Openlr 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
OpenlrExtendedArea	Openlr extended area	Extension to provide Area information in openLR format		no
OpenlrExtendedLinear	Openlr extended linear	Extension class for OpenLR Line location reference		no
OpenlrExtendedPoint	Openlr extended point	Extension class for OpenLR point.		no
OpenlrGeoCoordinate	Openlr geo coordinate	A geo-coordinate pair is a position in a map defined by its longitude and latitude coordinate values.		no
OpenlrGridAttributes	Openlr grid attributes	attributes required for the grid method		no
OpenlrGridLocationReference	Openlr grid location reference	the openLR method of areadefinition by providing repeating rectangles		no
OpenlrLastLocationReferencePoint	Openlr last location reference point	The sequence of location reference points is terminated by a last location reference point.		no
OpenlrLineAttributes	Openlr 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
OpenlrLineLocationReference	Openlr line location reference	A LineLocationReference is defined by an ordered sequence of location reference points and a terminating last location reference point.		no
OpenlrLocationReferencePoint	Openlr location reference point	The basis of a location reference is a sequence of location reference points (LRPs).		no

Class name	Designation	Definition	Stereotype	Abstract
OpenlrOffsets	Openlr offsets	Offsets are used to locate the start and end of a location more precisely than bounding to the nodes in a network.		no
OpenlrPathAttributes	Openlr 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 (LFR CNP) and distance to next point (DNP) data.		no
OpenlrPointAlongLine	Openlr point along line	Point along a line		no
OpenlrPointLocationReference	Openlr point location reference	A point location is a zero-dimensional element in a map that specifies a geometric location.		no
OpenlrPoiWithAccessPoint	Openlr 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
OpenlrPolygonCorners	Openlr polygon corners	geo-coordinate pairs. The coordinate pairs defining the corners of the underlying geometrical polygon.		no
OpenlrPolygonLocationReference	Openlr polygon location reference	the openLR method of areadefinition by providing points that bound the area		no
OpenlrRectangle	Openlr rectangle	two geo-coordinate pairs defining the rectangular		no
OpenlrRectangleLocationReference	Openlr 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.5.19.2 "OpenLRExtension" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
OpenlrBaseLocationReferencePoint	openlrCoordinate	Openlr coordinate		1..1	PointCoordinates
OpenlrClosedLineLocationReference	openlrLastLine	Openlr last line		1..1	OpenlrLineAttributes
OpenlrExtendedLinear	firstDirection	First direction	First OpenLR reference in first/main direction.	1..1	OpenlrLineLocationReference
	oppositeDirection	Opposite direction	If both direction, this is the reference in the opposite direction against firstDirection.	0..1	OpenlrLineLocationReference
OpenlrGeoCoordinate	openlrCoordinate	Openlr coordinate		1..1	PointCoordinates
OpenlrLineLocationReference	openlrOffsets	Openlr offsets		0..1	OpenlrOffsets
OpenlrPoiWithAccessPoint	openlrCoordinate	Openlr coordinate	The coordinate of the actual point of interest	1..1	PointCoordinates
OpenlrPolygonCorners	openlrCoordinate	Openlr coordinate		3..*	PointCoordinates
OpenlrRectangle	openlrLowerLeft	Openlr lower left	The lower left corner of the rectangle	1..1	PointCoordinates
	openlrUpperRight	Openlr upper right	the upper right corner of the rectangle	1..1	PointCoordinates

Table 42— Associations of the "OpenLRExtension" package

### A.5.19.3 "OpenLRExtension" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
OpenlrBasePointLocation	openlrOrientation	Openlr orientation	Orientation	1..1	OpenlrOrientationEnum
	openlrPositiveOffset	Openlr positive offset	The positive offset along the line of the location.	0..1	MetresAsNonNegativeInteger
	openlrSideOfRoad	Openlr side of road	Side of road	1..1	OpenlrSideOfRoadEnum
OpenlrCircleLocationReference	radius	Radius	The radius of the geometric area identified.	1..1	MetresAsNonNegativeInteger
OpenlrGridAttributes	openlrNumColumns	Openlr num columns	the number that the base rectangle should be multiplied in the east direction	1..1	NonNegativeInteger
	openlrNumRows	Openlr num rows	the number that the base rectangle should be multiplied in the north direction	1..1	NonNegativeInteger
<b>OpenlrLineAttributes</b>	<b>openlrBearing</b>	<b>Openlr bearing</b>	<b>defines the bearing field as an integer value between 0 and 360 whereby "0" is included and "360" is excluded from that range.</b>	<b>1..1</b>	<b>AngleInDegrees</b>
	<b>openlrFormOfWay</b>	<b>Openlr form of way</b>	<b>The form of way (FOW) can hold eight different values as described in the logical format.</b>	<b>1..1</b>	<b>OpenlrFormOfWayEnum</b>
	<b>openlrFunctionalRoadClass</b>	<b>Openlr functional road class</b>	<b>The functional road class (FRC) can hold eight different values as described in the logical format.</b>	<b>1..1</b>	<b>OpenlrFunctionalRoadClassEnum</b>
<b>OpenlrOffsets</b>	<b>openlrNegativeOffset</b>	<b>Openlr negative offset</b>	<b>The negative offset along the line of the location.</b>	<b>0..1</b>	<b>MetresAsNonNegativeInteger</b>
	<b>openlrPositiveOffset</b>	<b>Openlr positive offset</b>	<b>The positive offset along the line of the location.</b>	<b>0..1</b>	<b>MetresAsNonNegativeInteger</b>
<b>OpenlrPathAttributes</b>	<b>openlrDistanceToNextLRPoint</b>	<b>Openlr distance to next l r point</b>	<b>The DNP attribute measures the distance in meters between two consecutive LR-points along the location reference path as described in the logical format.</b>	<b>1..1</b>	<b>NonNegativeInteger</b>
	<b>openlrLowestFRCToNextLRPoint</b>	<b>Openlr lowest f r c to next l r point</b>	<b>The lowest FRC to the next point indicates the lowest functional road class used in the location reference path to the next LR-point.</b>	<b>1..1</b>	<b>OpenlrFunctionalRoadClassEnum</b>

Table 43— Attributes of the "OpenLRExtension" package

## A.5.20 "OperatorAction" package

### A.5.20.1 "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.5.20.2 "OperatorAction" package association roles

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

### A.5.20.3 "OperatorAction" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
OperatorAction	actionOrigin	Action origin	Indicates whether the actions to be undertaken by the operator are the result of an internal operation or external influence.	0..1	OperatorActionOriginEnum
	actionPlanIdentifier	Action plan identifier	The identifier of the traffic management action plan to which this action relates.	0..1	String
	operatorActionStatus	Operator action status	The status of the defined operator action.	0..1	OperatorActionStatusEnum

Table 45— Attributes of the "OperatorAction" package

## A.5.21 "OperatorActionExtension" package

### A.5.21.1 "OperatorActionExtension" package classes

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

Table 46— Classes of the "OperatorActionExtension" package

### A.5.21.2 "OperatorActionExtension" package association roles

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

### A.5.21.3 "OperatorActionExtension" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
OperatorActionExtended	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).	1..1	KilometresPerHour
	minimumSpeedLimit	Minimum speed limit	The minimum speed limit within the roadworks zone (i.e. there might be segments with a higher speed limit).	0..1	KilometresPerHour

Table 47— Attributes of the "OperatorActionExtension" package

### A.5.22 "PayloadPublication" package

#### A.5.22.1 "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.		yes

Table 48— Classes of the "PayloadPublication" package

#### A.5.22.2 "PayloadPublication" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
PayloadPublication	publicationCreator	Publication creator		1..1	InternationalIdentifier

Table 49— Associations of the "PayloadPublication" package



### A.5.22.3 "PayloadPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
PayloadPublication	defaultLanguage	Default language	The default language used throughout the payload publication.	1..1	Language
	feedDescription	Feed description	A description of the information which is to be found in the publications originating from the particular feed (URL).	0..1	MultilingualString
	feedType	Feed type	A classification of the information which is to be found in the publications originating from the particular feed.	0..1	String
	publicationTime	Publication time	Date/time at which the payload publication was created.	1..1	DateTime

Table 50— Attributes of the "PayloadPublication" package

### A.5.23 "PayloadPublicationExtensions" package

#### A.5.23.1 "PayloadPublicationExtensions" package classes

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

Table 51— Classes of the "PayloadPublicationExtensions" package

#### A.5.23.2 "PayloadPublicationExtensions" package association roles

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

### A.5.23.3 "PayloadPublicationExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
LanguageInfo	mainLanguage	Main language	Specifies the language in which the message is created	1..1	Language
	translation	Translation	Specification of the language used during translation. Multiple translations are possible.	0..*	Language

Table 52— Attributes of the "PayloadPublicationExtensions" package

### A.5.24 "Point" package

#### A.5.24.1 "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.		yes
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.5.24.2 "Point" package association roles

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

### A.5.24.3 "Point" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
AlertCPoint	alertCLocationCountry Code	ALERT-C location country code	EBU country code.	1..1	String
	alertCLocationTableNumber	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.	1..1	String
	alertCLocationTableVersion	ALERT-C location table version	Version number associated with an ALERT-C table reference.	1..1	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.	0..1	NonNegativeInteger

**Table 54— Attributes of the "Point" package**

## A.5.25 "PointAlongLinearElement" package

### A.5.25.1 "PointAlongLinearElement" package classes

Class name	Designation	Definition	Stereotype	Abstract
DistanceAlongLinearElement	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
DistanceFromLinearElementReferent	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
DistanceFromLinearElementStart	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
LinearElementByPoints	Linear element by points	A linear element along a single linear object defined by its start and end points.		no
PercentageDistanceAlongLinearElement	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
PointAlongLinearElement	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.5.25.2 "PointAlongLinearElement" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
DistanceFromLinearElementReferent	fromReferent	From referent	A known location along the linear element from which the distanceAlong is measured, termed the "fromReferent" in ISO 19148.	1..1	Referent
	towardsReferent	Towards referent	A known location along the linear element towards which the distanceAlong is measured, termed the "towardsReferent" in ISO 19148.	0..1	Referent
LinearElementByPoints	endPointOfLinearElements	End point of linear element	The referent at a known location on the linear object which defines the end of the linear element.	1..1	Referent
	intermediatePointOnLinearElement	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.	0..*	Referent
	startPointOfLinearElement	Start point of linear element	The referent at a known location on the linear object which defines the start of the linear element.	1..1	Referent

Table 566— Associations of the "PointAlongLinearElement" package

### A.5.25.3 "PointAlongLinearElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
DistanceFromLinearElementStart	distanceAlong	Distance along	A measure of distance along a linear element.	1..1	MetresAsFloat
DistanceFromLinearElementStart	distanceAlong	Distance along	A measure of distance along a linear element.	1..1	MetresAsFloat
LinearElement	linearElementNature	Linear element nature	An indication of the nature of the linear element.	0..1	LinearElementNatureEnum
	linearElementReferenceModel	Linear element reference model	The identifier of a road network reference model which segments the road network according to specific business rules.	0..1	String
	linearElementReferenceModelVersion	Linear element reference model version	The version of the identified road network reference model.	0..1	String
	roadName	Road name	Name of the road of which the linear element forms a part.	0..1	MultilingualString
	roadNumber	Road number	Identifier/number of the road of which the linear element forms a part.	0..1	String
PercentageDistanceAlongLinearElement	percentageDistanceAlong	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.	1..1	Percentage
PointAlongLinearElement	administrativeAreaOfPoint	Administrative area of point	Identification of the road administration area which contains the specified point.	0..1	MultilingualString
	directionBoundAtPoint	Direction bound at point	The direction of traffic flow at the specified point in terms of general destination direction.	0..1	DirectionEnum
	directionRelativeAtPoint	Direction relative at point	The direction of traffic flow at the specified point relative to the direction in which the linear element is defined.	0..1	LinearReferencingDirectionEnum
	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.	0..1	HeightGradeEnum

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Referent	referentDescription	Referent description	Description of the referent.	0..1	MultilingualString
	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.	0..1	String
	referentType	Referent type	The type of the referent.	1..1	ReferentTypeEnum

Table 57— Attributes of the "PointAlongLinearElement" package

## A.5.26 "ReusableClasses" package

### A.5.26.1 "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.		no
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.5.26.2 "ReusableClasses" package association roles

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

### A.5.26.3 "ReusableClasses" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
HeaderInformation	areaOfInterest	Area of interest	The extent of the geographic area to which the related information should be distributed.	0..1	AreaOfInterestEnum
	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	ConfidentialityValueEnum
	informationStatus	Information status	The status of the related information (real, test, exercise ...).	1..1	InformationStatusEnum
	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.	0..1	UrgencyEnum
InternationalIdentifier	country	Country	ISO 3166-1 two character country code.	1..1	CountryEnum
	nationalIdentifier	National identifier	Identifier or name unique within the specified country.	1..1	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.	1..1	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.	0..1	Boolean
	sourceCountry	Source country	ISO 3166-1 two character country code of the source of the information.	0..1	CountryEnum
	sourceIdentification	Source identification	Identifier of the organisation or the traffic equipment which has produced the information relating to this version of the information.	0..1	String
	sourceName	Source name	The name of the organisation which has produced the information relating to this version of the information.	0..1	MultilingualString



Class name	Attribute name	Designation	Definition	Multiplicity	Type
	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.	0..1	SourceTypeEnum
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.	1..1	Url
	urlLinkDescription	URL link description	Description of the relevant information available on the Internet from the URL link.	0..1	MultilingualString
	urlLinkType	URL link type	Details of the type of relevant information available on the Internet from the URL link.	0..1	UrlLinkTypeEnum

Table 59— Attributes of the "ReusableClasses" package

## A.5.27 "Roadworks" package

### A.5.27.1 "Roadworks" package classes

Class name	Designation	Definition	Stereotype	Abstract
MaintenanceWorks	Maintenance works	Roadworks involving the maintenance or installation of infrastructure.		no
Roadworks	Roadworks	Highway maintenance, installation and construction activities that may potentially affect traffic operations.		yes
Subjects	Subjects	The subjects with which the roadworks are associated.		no

Table 60— Classes of the "Roadworks" package

### A.5.27.2 "Roadworks" package association roles

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

### A.5.27.3 "Roadworks" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
MaintenanceWorks	roadMaintenanceType	Road maintenance type	The type of road maintenance or installation work at the specified location.	1..*	RoadMaintenanceTypeEnum
Subjects	subjectTypeOfWorks	Subject type of works	The subject type of the roadworks (i.e. on what the construction or maintenance work is being performed).	1..1	SubjectTypeOfWorksEnum

Table 61— Attributes of the "Roadworks" package

### A.5.28 "SafetyRelatedMessages" package

#### A.5.28.1 "SafetyRelatedMessages" package classes

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

Table 62— Classes of the "SafetyRelatedMessages" package

#### A.5.28.2 "SafetyRelatedMessages" package association roles

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

#### A.5.28.3 "SafetyRelatedMessages" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
SituationRecordExtendedApproved	safetyRelatedMessage	Safety related message	Indicates, whether this SituationRecord specifies a safety related message according to Commission Delegated Regulation (EU) No 886/2013.	0..1	Boolean

Table 63— Attributes of the "SafetyRelatedMessages" package

## A.5.29 "SituationExtensions" package

### A.5.29.1 "SituationExtensions" package classes

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

Table 64— Classes of the "SituationExtensions" package

### A.5.29.2 "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.).	1..1	SituationRecord

Table 65— Associations of the "SituationExtensions" package

### A.5.29.3 "SituationExtensions" package attributes

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

### A.5.30 "SituationPublication" package

#### A.5.30.1 "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.	versionedIdentifiable	no
SituationPublication	Situation publication	A publication containing zero or more traffic/travel situations.		no

Table 66— Classes of the "SituationPublication" package

#### A.5.30.2 "SituationPublication" package association roles

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

#### A.5.30.3 "SituationPublication" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
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.	0..1	SeverityEnum
	relatedSituation	Related situation	A reference to a related situation via its unique identifier.	0..*	VersionedReference
	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.	0..1	DateTime

Table 67— Attributes of the "SituationPublication" package

## A.5.31 "SituationRecord" package

### A.5.31.1 "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.	versionedIdentifiable	yes

Table 68— Classes of the "SituationRecord" package

### A.5.31.2 "SituationRecord" package association roles

Class name	Role name	Designation	Definition	Multiplicity	Target
SituationRecord	generalPublicComment	General public comment	A comment which may be freely distributed to the general public	0..*	Comment
	nonGeneralPublicComment	Non general public comment	A comment which should not be distributed to the general public.	0..*	Comment

Table 69— Associations of the "SituationRecord" package

### A.5.31.3 "SituationRecord" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
Comment	comment	Comment	A free text comment that can be used by the operator to convey un-coded observations/information.	1..1	MultilingualString
	commentDateTime	Comment date time	The date/time at which the comment was made.	0..1	DateTime
	commentType	Comment type	A classification of the the type of comment.	0..1	CommentTypeEnum
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.	0..1	VersionedReference
NonManagedCause	causeDescription	Cause description	Description of a cause which is not managed by the publication creator (e.g. an off network cause).	0..1	MultilingualString
	causeType	Cause type	Indicates an external influence that may be the causation of components of a situation.	0..1	CauseTypeEnum
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.	0..1	ConfidentialityValueEnum
	probabilityOfOccurrence	Probability of occurrence	An assessment of the degree of likelihood that the reported event will occur.	1..1	ProbabilityOfOccurrenceEnum
	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.	0..1	SeverityEnum
	situationRecordCreationReference	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.	0..1	String
	situationRecordCreationTime	Situation record creation time	The date/time that the SituationRecord object (the first version of the record) was created by the original supplier.	1..1	DateTime

Class name	Attribute name	Designation	Definition	Multiplicity	Type
	situationRecordCreationTime	Situation record creation time	The date/time that the SituationRecord object (the first version of the record) was created by the original supplier.	1..1	DateTime
	situationRecordFirstSupplierVersionTime	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.	0..1	DateTime
	situationRecordObservationTime	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.	0..1	DateTime
	situationRecordVersionTime	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.	1..1	DateTime

**Table 70— Attributes of the "SituationRecord" package**

### A.5.32 "SituationRecordExtensions" package

#### A.5.32.1 "SituationRecordExtensions" package classes

Class name	Designation	Definition	Stereotype	Abstract
AffectedModesOfTransport	Affected modes of transport	Affected modes of transport or types of vehicles by the specified event		no
SituationRecordExtended	Situation record extended	Situation record extensions relevant to Hungarian Events Profile		no

**Table 71— Classes of the "SituationRecordExtensions" package**

#### A.5.32.2 "SituationRecordExtensions" package association roles

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

### A.5.32.3 "SituationRecordExtensions" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
AffectedModesOfTransport	affectedMode	Affected mode	Affected mode of transportation by the event	1..*	ExtendedVehicleTypeEnum
SituationRecordExtended	phaseReferenceId	Phase reference id	A reference to a situation record that represents a roadwork phase	0..1	VersionedReference

Table 72— Attributes of the "SituationRecordExtensions" package

### A.5.33 "TimePeriodOfDay" package

#### A.5.33.1 "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.		yes

Table 73— Classes of the "TimePeriodOfDay" package

#### A.5.33.2 "TimePeriodOfDay" package association roles

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

#### A.5.33.3 "TimePeriodOfDay" package attributes

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

Table 74— Attributes of the "TimePeriodOfDay" package



## A.5.34 "TrafficElement" package

### A.5.34.1 "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 75— Classes of the "TrafficElement" package

### A.5.34.2 "TrafficElement" package association roles

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

### A.5.34.3 "TrafficElement" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
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.	0..1	AbnormalTrafficTypeEnum
	queueLength	Queue length	The length of a queue or the average length of queues in separate lanes due to a situation.	0..1	MetresAsNonNegativeInteger

Table 76— Attributes of the "TrafficElement" package

## A.5.35 "Validity" package

### A.5.35.1 "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 77— Classes of the "Validity" package

**A.5.35.2 "Validity" package association roles**

<b>Class name</b>	<b>Role name</b>	<b>Designation</b>	<b>Definition</b>	<b>Multiplicity</b>	<b>Target</b>
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.	0..*	Period
Period	recurringDayWeekMonthPeriod	Recurring day week month period	A recurring period defined in terms of days of the week, weeks of the month and months of the year.	0..*	DayWeekMonth
	recurringTimePeriodOfDay	Recurring time period of day	A recurring period of a day.	0..*	TimePeriodOfDay
Validity	validityTimeSpecification	Validity time specification	A specification of periods of validity defined by overall bounding start and end times and the possible intersection of valid periods with exception periods (exception periods overriding valid periods).	1..1	OverallPeriod

**Table 78— Associations of the "Validity" package**

### A.5.35.3 "Validity" package attributes

Class name	Attribute name	Designation	Definition	Multiplicity	Type
DayWeekMonth	applicableDay	Applicable day	Applicable day of the week. "All days of the week" is expressed by non-inclusion of this attribute.	0..7	DayEnum
	applicableMonth	Applicable month	Applicable month of the year. "All months of the year" is expressed by non-inclusion of this attribute.	0..12	MonthOfYearEnum
	applicableWeek	Applicable week	Applicable week of the month (1 to 5). "All weeks of the month" is expressed by non-inclusion of this attribute.	0..5	WeekOfMonthEnum
OverallPeriod	overallEndTime	Overall end time	End of bounding period of validity defined by date and time.	0..1	DateTime
	overallStartTime	Overall start time	Start of bounding period of validity defined by date and time.	1..1	DateTime
Period	endOfPeriod	End of period	End of a period.	0..1	DateTime
	periodName	Period name	The name of the period.	0..1	MultilingualString
	startOfPeriod	Start of period	Start of period.	0..1	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.	0..1	Boolean
	validityStatus	Validity status	Specification of validity, either explicitly overriding the validity time specification or confirming it.	1..1	ValidityStatusEnum

Table 79— Attributes of the "Validity" package

## A.5.36 "VehicleCharacteristics" package

### A.5.36.1 "VehicleCharacteristics" package classes

Class name	Designation	Definition	Stereotype	Abstract
GrossWeightCharacteristic	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 80— Classes of the "VehicleCharacteristics" package

### A.5.36.2 "VehicleCharacteristics" package association roles

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

**A.5.36.3 "VehicleCharacteristics" package attributes**

Class name	Attribute name	Designation	Definition	Multiplicity	Type
GrossWeightCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	1..1	ComparisonOperatorEnum
	grossVehicleWeight	Gross vehicle weight	The gross weight of the vehicle and its load, including any trailers.	1..1	Tonnes
HeightCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	1..1	ComparisonOperatorEnum
	vehicleHeight	Vehicle height	The height of the highest part, excluding antennae, of an individual vehicle above the road surface, in metres.	1..1	MetresAsFloat
LengthCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	1..1	ComparisonOperatorEnum
	vehicleLength	Vehicle length	The overall distance between the front and back of an individual vehicle, including the length of any trailers, couplings, etc.	1..1	MetresAsFloat
VehicleCharacteristics	vehicleType	Vehicle type	Vehicle type.	0..*	VehicleTypeEnum
WidthCharacteristic	comparisonOperator	Comparison operator	The operator to be used in the vehicle characteristic comparison operation.	1..1	ComparisonOperatorEnum
	vehicleWidth	Vehicle width	The maximum width of an individual vehicle, in metres.	1..1	MetresAsFloat

**Table 81— Attributes of the "VehicleCharacteristics" package**

## **A.6 Data Dictionary of <<datatype>> for "HungarianEventsProfile"**

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

### **A.6.1 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.6.2 The <<datatype>> "AngleInDegrees"**

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

### **A.6.3 The <<datatype>> "KilometresPerHour"**

A measure of speed defined in kilometres per hour.

### **A.6.4 The <<datatype>> "MetresAsFloat"**

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

### **A.6.5 The <<datatype>> "MetresAsNonNegativeInteger"**

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

### **A.6.6 The <<datatype>> "Percentage"**

A measure of percentage.

### **A.6.7 The <<datatype>> "Seconds"**

Seconds.

### **A.6.8 The <<datatype>> "Tonnes"**

A measure of weight defined in metric tonnes.

### **A.6.9 The <<datatype>> "VehiclesPerHour"**

Vehicles per hour.

## A.7 Data Dictionary of <<enumerations>> for "HungarianEventsProfile"

This clause contains the definitions of all enumerations which are used in the Hungarian Events Profile.

### A.7.1 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 82— Values contained in the enumeration "AbnormalTrafficTypeEnum"



## A.7.2 The <<enumeration>> "AccidentCauseEnum"

Collection of the type of accident causes.

Enumerated value name	Designation	Definition
avoidanceOfObstacles	Avoidance of obstacles	Avoidance of obstacles on the roadway.
driverDistraction	Driver distraction	Driver distraction.
driverDrugAbuse	Driver drug abuse	Driver under the influence of drugs.
driverIllness	Driver illness	Driver illness.
exceedingSpeedsLimits	Exceeding speeds limits	Loss of vehicle control due to excessive vehicle speed.
excessAlcohol	Excess alcohol	Driver abilities reduced due to driving under the influence of alcohol. Alcohol levels above nationally accepted limit.
excessiveDriverTiredness	Excessive driver tiredness	Excessive tiredness of the driver.
impermissibleManoeuvre	Impermissible manoeuvre	A driving manoeuvre which was not permitted.
limitedVisibility	Limited visibility	Limited or impaired visibility.
notKeepingASafeDistance	Not keeping a safe distance	Not keeping a safe distance from the vehicle in front.
onTheWrongSideOfTheRoad	On the wrong side of the road	Driving on the wrong side of the road.
other	Other	Other than as defined in this enumeration.
pedestrianInRoad	Pedestrian in road	Pedestrian in the roadway.
poorLaneAdherence	Poor lane adherence	Not keeping to lane.
poorMergeEntryOrExitJudgement	Poor merge entry or exit judgement	Poor judgement when merging at an entry or exit point of a carriageway or junction.
poorRoadSurfaceCondition	Poor road surface condition	Poor road surface condition.
poorSurfaceAdherence	Poor surface adherence	Poor road surface adherence.
undisclosed	Undisclosed	Undisclosed cause.
unknown	Unknown	Unknown cause.
vehicleFailure	Vehicle failure	Malfunction or failure of vehicle function.

Table 83— Values contained in the enumeration "AccidentCauseEnum"

### A.7.3 The <<enumeration>> "AccidentTypeEnum"

Collection of descriptive terms for types of accidents.

Enumerated value name	Designation	Definition
accident	Accident	Accidents are situations in which one or more vehicles lose control and do not recover. They include collisions between vehicle(s) or other road user(s), between vehicle(s) and fixed obstacle(s), or they result from a vehicle running off the road.
accidentInvolvingBicycles	Accident involving bicycles	Includes all accidents involving at least one bicycle.
accidentInvolvingBuses	Accident involving buses	Includes all accidents involving at least one passenger vehicle.
accidentInvolvingHazardousMaterials	Accident involving hazardous materials	Includes all accidents involving at least one vehicle believed to be carrying materials, which could present an additional hazard to road users.
accidentInvolvingHeavyLorries	Accident involving heavy lorries	Includes all accidents involving at least one heavy goods vehicle.
accidentInvolvingMassTransitVehicle	Accident involving mass transit vehicle	Includes all accidents involving at least one mass transit vehicle.
accidentInvolvingMopeds	Accident involving mopeds	Includes all accidents involving at least one moped.
accidentInvolvingMotorcycles	Accident involving motorcycles	Includes all accidents involving at least one motorcycle.
accidentInvolvingRadioactiveMaterial	Accident involving radioactive material	Accident involving radioactive material.
accidentInvolvingTrain	Accident involving train	Includes all accidents involving collision with a train.
chemicalSpillageAccident	Chemical spillage accident	Includes all situations resulting in a spillage of chemicals on the carriageway.
collision	Collision	Collision of vehicle with another object of unspecified type.
collisionWithAnimal	Collision with animal	Collision of vehicle with one or more animals.
collisionWithObstruction	Collision with obstruction	Collision of vehicle with an object of a stationary nature.
collisionWithPerson	Collision with person	Collision of vehicle with one or more pedestrians.

Enumerated value name	Designation	Definition
earlierAccident	Earlier accident	An earlier reported accident that is causing disruption to traffic or is resulting in further accidents.
fuelSpillageAccident	Fuel spillage accident	Includes all situations resulting in a spillage of fuel on the carriageway.
headOnCollision	Head on collision	Collision of vehicle with another vehicle head on.
headOnOrSideCollision	Head on or side collision	Collision of vehicle with another vehicle either head on or sideways.
jackknifedArticulatedLorry	Jack-knifed articulated lorry	Includes all situations resulting in a heavy goods vehicle folding together in an accidental skidding movement on the carriageway.
jackknifedCaravan	Jack-knifed caravan	Includes all situations resulting in a vehicle and caravan folding together in an accidental skidding movement on the carriageway.
jackknifedTrailer	Jack-knifed trailer	Includes all situations resulting in a vehicle and trailer folding together in an accidental skidding movement on the carriageway.
multipleVehicleCollision	Multiple vehicle collision	Multiple vehicles involved in a collision.
multivehicleAccident	Multivehicle accident	Includes all accidents involving three or more vehicles.
oilSpillageAccident	Oil spillage accident	Includes all situations resulting in a spillage of oil on the carriageway.
other	Other	Other than as defined in this enumeration.
overturnedHeavyLorry	Overturned heavy lorry	Includes all situations resulting in the overturning of a heavy goods vehicle on the carriageway.
overturnedTrailer	Overturned trailer	Includes all situations resulting in the overturning of a trailer.
overturnedVehicle	Overturned vehicle	Includes all situations resulting in the overturning of a vehicle (of unspecified type) on the carriageway.
rearCollision	Rear collision	Includes all accidents where one or more vehicles have collided with the rear of one or more other vehicles.

Enumerated value name	Designation	Definition
secondaryAccident	Secondary accident	Includes all situations resulting from vehicles avoiding or being distracted by earlier accidents.
seriousAccident	Serious accident	Includes all accidents believed to involve fatality or injury expected to require overnight hospitalisation.
sideCollision	Side collision	Includes all accidents where one or more vehicles have collided with the side of one or more other vehicles.
vehicleOffRoad	Vehicle off road	Includes all accidents where one or more vehicles have left the roadway.
vehicleSpunAround	Vehicle spun around	Includes all accidents where a vehicle has skidded and has come to rest not facing its intended line of travel.

**Table 84— Values contained in the enumeration "AccidentTypeEnum"**

#### A.7.4 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 85— Values contained in the enumeration "AlertCDirectionEnum"**

### A.7.5 The <<enumeration>> "AnimalPresenceTypeEnum"

Types of animal presence.

Enumerated value name	Designation	Definition
animalsOnTheRoad	Animals on the road	Traffic may be disrupted due to animals on the roadway.
herdOfAnimalsOnTheRoad	Herd of animals on the road	Traffic may be disrupted due to a herd of animals on the roadway.
largeAnimalsOnTheRoad	Large animals on the road	Traffic may be disrupted due to large animals on the roadway.

Table 86— Values contained in the enumeration "AnimalPresenceTypeEnum"

### A.7.6 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.7.7 The <<enumeration>> "AuthorityOperationTypeEnum"

Types of authority operations.

Enumerated value name	Designation	Definition
accidentInvestigationWork	Accident investigation work	An operation involving authorised investigation work connected to an earlier reported accident.
bombSquadInAction	Bomb squad in action	An operation where a bomb squad is in action to deal with suspected or actual explosive or incendiary devices which may cause disruption to traffic.
civilEmergency	Civil emergency	A situation, perceived or actual, relating to a civil emergency which could disrupt traffic. This includes large scale destruction, through events such as earthquakes, insurrection, and civil disobedience.
customsOperation	Customs operation	A permanent or temporary operation established by customs and excise authorities on or adjacent to the carriageway.
juridicalReconstruction	Juridical reconstruction	An operation involving the juridical reconstruction of events for the purposes of judicial or legal proceedings.
other	Other	Other than as defined in this enumeration.
policeCheckPoint	Police check point	A permanent or temporary operation established on or adjacent to the carriageway for use by police or other authorities.
policeInvestigation	Police investigation	A temporary operation established on or adjacent to the carriageway by the police associated with an ongoing investigation.
roadOperatorCheckPoint	Road operator check point	A permanent or temporary operation established on or adjacent to the carriageway for use by the road operator, such as for survey or inspection purposes, but not for traffic management purposes.
survey	Survey	A permanent or temporary operation established by authorities on or adjacent to the carriageway for the purpose of gathering statistics or other traffic related information.
transportOfVip	Transport of VIP	An operation to transport one or more VIPs.
undefinedAuthorityActivity	Undefined authority activity	An authority activity of undefined type.



Enumerated value name	Designation	Definition
vehicleInspectionCheckPoint	Vehicle inspection check point	A permanent or temporary operation established on or adjacent to the carriageway for inspection of vehicles by authorities (e.g. vehicle safety checks and tachograph checks).
vehicleWeighing	Vehicle weighing	A permanent or temporary operation established on or adjacent to the carriageway for weighing of vehicles by authorities.
weighInMotion	Weigh in motion	A permanent or temporary facility established by authorities on the carriageway for weighing vehicles while in motion.

**Table 87— Values contained in the enumeration "AuthorityOperationTypeEnum"**

### A.7.8 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 882— Values contained in the enumeration "CarParkStatusEnum"**

## A.7.9 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.7.10 The <<enumeration>> "CauseTypeEnum"**

Types of causes of situations which are not managed or are off network.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
accident	Accident	Accident.
congestion	Congestion	Traffic congestion.
earlierAccident	Earlier accident	An earlier accident.
earlierEvent	Earlier event	An earlier event.
earlierIncident	Earlier incident	An earlier incident.
equipmentFailure	Equipment failure	Failure of roadside equipment.
excessiveHeat	Excessive heat	Excessive heat.
frost	Frost	Frost.
holidayTraffic	Holiday traffic	Holiday traffic.
infrastructureFailure	Infrastructure failure	Failure of road infrastructure.
largeNumbersOfVisitors	Large numbers of visitors	Large numbers of visitors.
obstruction	Obstruction	Obstruction (of unspecified type) on the roadway.
other	Other	Other than as defined in this enumeration.
pollutionAlert	Pollution alert	An alert relating to dangerous levels of pollution.
poorWeather	Poor weather	Poor weather conditions.
problemsAtBorderPost	Problems at border post	Problems at the border crossing.
problemsAtCustomPost	Problems at custom post	Problems at the customs post on the border.
problemsOnLocalRoads	Problems on local roads	Problems (of an unspecified nature) on the local roads.
radioactiveLeakAlert	Radioactive leak alert	Radioactive leak alert.
roadsideEvent	Roadside event	A roadside event (of unspecified nature) whether planned or not.
rubberNecking	Rubber necking	Drivers being distracted and turning to look at an accident or other roadside event.
securityIncident	Security incident	A security incident.
shearWeightOfTraffic	Shear weight of traffic	Shear weight of traffic.
technicalProblems	Technical problems	Technical problems.
terrorism	Terrorism	A terrorist incident.

Enumerated value name	Designation	Definition
toxicCloudAlert	Toxic cloud alert	An alert relating to the release of toxic gases and/or particulates.
vandalism	Vandalism	A vandalism incident.

Table 891— Values contained in the enumeration "CauseTypeEnum"

#### A.7.11 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.7.12 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.7.13 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.7.14 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.
restrictedToAuthoritiesAndTrafficOperators	Restricted to authorities and traffic operators	Restricted for use only by authorities and traffic operators.
restrictedToAuthoritiesTrafficOperatorsAndPublishers	Restricted to authorities traffic operators and publishers	Restricted for use only by authorities, traffic operators and publishers (service providers).
restrictedToAuthoritiesTrafficOperatorsAndVms	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.7.15 The <<enumeration>> "CountryEnum"

List of countries.

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

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

**Table 88— Values contained in the enumeration "CountryEnum"**

### A.7.16 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.7.17 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.
betweenTenMinutesAndThirtyMinutes	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.7.18 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.7.19 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.7.20 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.
<b>demonstration</b>	<b>Demonstration</b>	<b>A public protest with the potential to disrupt traffic.</b>
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.7.21 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.7.22 The <<enumeration>> "EnvironmentalObstructionTypeEnum"

Types of environmental obstructions.

Enumerated value name	Designation	Definition
avalanches	Avalanches	The road may be obstructed or partially obstructed due to snow slides.
earthquakeDamage	Earthquake damage	The road may be obstructed or partially obstructed because of damage caused by an earthquake.
fallenTrees	Fallen trees	The road is obstructed or partially obstructed by one or more fallen trees.
fallingIce	Falling ice	Falling ice off trees, power lines or structures which may cause traffic disruption.
fallingLightIceOrSnow	Falling light ice or snow	Falling light ice or snow off trees, power lines or structures which may cause traffic disruption.
flashFloods	Flash floods	The road may become quickly inundated by powerful floodwaters due to heavy rain nearby.
flooding	Flooding	The road is obstructed or partially obstructed by flood water.
forestFire	Forest fire	Traffic may be disrupted due to a forest fire adjacent to the roadway.
grassFire	Grass fire	Traffic may be disrupted due to a grass fire adjacent to the roadway.
landslips	Landslips	The road may be obstructed or partially obstructed due to landslides.
mudSlide	Mud slide	The road may be obstructed or partially obstructed due to mudslides.
other	Other	Other than as defined in this enumeration.
rockfalls	Rockfalls	The road may be obstructed or partially obstructed due to fallen rocks.
seriousFire	Serious fire	Traffic may be disrupted due to a fire (other than a vehicle fire) adjacent to the roadway.
sewerOverflow	Sewer overflow	The road is obstructed or partially obstructed by overflows from one or more sewers.
smokeOrFumes	Smoke or fumes	Smoke or fumes which may hinder driving conditions or distract drivers.

Enumerated value name	Designation	Definition
stormDamage	Storm damage	The road may be obstructed or partially obstructed by debris caused by strong winds.
subsidence	Subsidence	The road surface has sunken or collapsed in places.

**Table 102— Values contained in the enumeration "EnvironmentalObstructionTypeEnum"**

### **A.7.23 The <<enumeration>> "EquipmentOrSystemFaultTypeEnum"**

Types of fault, malfunctioning or non operational conditions of equipment or systems.

Enumerated value name	Designation	Definition
notWorking	Not working	Not working or functioning.
outOfService	Out of service	Out of service (usually for operational reasons).
workingIncorrectly	Working incorrectly	Working incorrectly.
workingIntermittently	Working intermittently	Working intermittently.

**Table 103— Values contained in the enumeration "EquipmentOrSystemFaultTypeEnum"**

## A.7.24 The <<enumeration>> "EquipmentOrSystemTypeEnum"

Types of equipment and systems used to support the operation of the road network.

Enumerated value name	Designation	Definition
anprCameras	Anpr cameras	Automatic number plate recognition cameras.
automatedTollSystem	Automated toll system	Automated toll system.
cctvCameras	Cctv cameras	Closed-circuit television cameras.
emergencyRoadsideTelephones	Emergency roadside telephones	Emergency roadside telephones.
galleryLights	Gallery lights	Gallery lights.
laneControlSigns	Lane control signs	Signs used to control lane usage (e.g. in tidal flow systems or hard shoulder running).
levelCrossing	Level crossing	Level crossing (barriers and signals).
matrixSigns	Matrix signs	Matrix signs. These normally comprise a symbol display area surrounded by four lights (usually amber) which flash when a symbol is displayed.
other	Other	Other than as defined in this enumeration.
rampControls	Ramp controls	Ramp control equipment.
roadsideCommunicationsSystem	Roadside communications system	Roadside communications system which is used by one or more roadside equipments or systems.
roadsidePowerSystem	Roadside power system	Roadside power system which is used by one or more roadside equipments or systems.
speedControlSigns	Speed control signs	Signs used to control traffic speed.
streetLighting	Street lighting	Street or road lighting.
temporaryTrafficLights	Temporary traffic lights	Temporary traffic lights.
tollGates	Toll gates	Toll gates.
trafficLightSets	Traffic light sets	Sets of traffic lights.
trafficSignals	Traffic signals	Traffic signals.
tunnelLights	Tunnel lights	Tunnel lights.
tunnelVentilation	Tunnel ventilation	Tunnel ventilation system.
variableMessageSigns	Variable message signs	Variable message signs.

**Table 104— Values contained in the enumeration "EquipmentOrSystemTypeEnum"**

### **A.7.25 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.
withOddNumberedRegistrationPlates	With odd numbered registration plates	Vehicle with odd numbered registration plate.

**Table 95— Values contained in the enumeration "ExtendedVehicleTypeEnum"**

#### **A.7.26 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.
leaveYourVehicleProceedToNextSafePlace	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).

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
observeSignals	Observe signals	Observe signals.
observeSigns	Observe signs	Observe signs.
onlyTravelIfAbsolutelyNecessary	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.
switchOffMobilePhonesAndTwoWayRadios	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.7.27 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.7.28 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.7.29 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.7.30 The <<enumeration>> "InfrastructureDamageTypeEnum"**

Types of infrastructure damage which may have an effect on the road network.

Enumerated value name	Designation	Definition
burstPipe	Burst pipe	The road surface has sunken or collapsed in places due to burst pipes.
burstWaterMain	Burst water main	Traffic may be disrupted due to local flooding and/or subsidence because of a broken water main.
collapsedSewer	Collapsed sewer	The road surface has sunken or collapsed in places due to sewer failure.
damagedBridge	Damaged bridge	Damage to a bridge that may cause traffic disruption.
damagedCrashBarrier	Damaged crash barrier	Damage to a crash barrier that may cause traffic disruption.
damagedFlyover	Damaged flyover	Damage to an elevated section of the carriageway over another carriageway that may cause traffic disruption.
damagedGallery	Damaged gallery	Damage to a gallery that may cause traffic disruption.
damagedGantry	Damaged gantry	Damage to a gantry above the roadway that may cause traffic disruption.
damagedRoadSurface	Damaged road surface	Damage to the road surface that may cause traffic disruption.
damagedTunnel	Damaged tunnel	Damage to a tunnel that may cause traffic disruption.
damagedViaduct	Damaged viaduct	Damage to a viaduct that may cause traffic disruption.
fallenPowerCables	Fallen power cables	The road is obstructed or partially obstructed by one or more fallen power cables.
gasLeak	Gas leak	Traffic may be disrupted due to an explosion hazard from gas escaping in or near the roadway.
other	Other	Other than as defined in this enumeration.
weakBridge	Weak bridge	Weak bridge capable of carrying a reduced load, typically with a reduced weight limit restriction imposed.

**Table 110— Values contained in the enumeration "InfrastructureDamageTypeEnum"**



### **A.7.31 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.
<b>crawlerLane</b>	<b>Crawler lane</b>	<b>In the crawler lane.</b>
emergencyLane	Emergency lane	In the emergency lane.
escapeLane	Escape lane	In the escape lane.
expressLane	Express lane	In the express lane.
<b>hardShoulder</b>	<b>Hard shoulder</b>	<b>On the hard shoulder.</b>
heavyVehicleLane	Heavy vehicle lane	In the heavy vehicle lane.
<b>lane1</b>	<b>Lane1</b>	<b>In the first lane numbered from nearest the hard shoulder to central median.</b>
<b>lane2</b>	<b>Lane2</b>	<b>In the second lane numbered from nearest the hard shoulder to central median.</b>
<b>lane3</b>	<b>Lane3</b>	<b>In the third lane numbered from nearest the hard shoulder to central median.</b>
<b>lane4</b>	<b>Lane4</b>	<b>In the fourth lane numbered from nearest the hard shoulder to central median.</b>
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.7.32 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.7.33 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.7.34 The <<enumeration>> "LocationDescriptorEnum"**

List of descriptors to help to identify a specific location.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.7.35 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.7.36 The <<enumeration>> "MonthOfYearEnum"**

A list of the months of the year.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.7.37 The <<enumeration>> "NonWeatherRelatedRoadConditionTypeEnum"**

Types of road surface conditions which are not related to the weather.

Enumerated value name	Designation	Definition
dieselOnRoad	Diesel on road	Increased skid risk due to diesel on the road.
leavesOnRoad	Leaves on road	Increased skid risk due to leaves on road.
looseChippings	Loose chippings	Increased skid risk and injury risk due to loose chippings on road.
looseSandOnRoad	Loose sand on road	Increased skid risk due to loose sand on road.
mudOnRoad	Mud on road	Increased skid risk due to mud on road.
oilOnRoad	Oil on road	Increased skid risk due to oil on road.
other	Other	Other than as defined in this enumeration.
petrolOnRoad	Petrol on road	Increased skid risk due to petrol on road.
roadSurfaceInPoorCondition	Road surface in poor condition	The road surface is damaged, severely rutted or potholed (i.e. it is in a poor state of repair).
slipperyRoad	Slippery road	The road surface is slippery due to an unspecified non-weather related cause.

**Table 117— Values contained in the enumeration "NonWeatherRelatedRoadConditionTypeEnum"**

### **A.7.38 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.
spillageOccurringFromMovingVehicle	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.7.39 The <<enumeration>> "OpenlrFormOfWayEnum"

Enumeration of form 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 "OpenlrFormOfWayEnum"

### A.7.40 The <<enumeration>> "OpenlrFunctionalRoadClassEnum"

Enemuration of functional road class

Enumerated value name	Designation	Definition
FRC0	F r c0	Main road, highest importance
FRC1	F r c1	First class road
FRC2	F r c2	Second class road
FRC3	F r c3	Third class road
FRC4	F r c4	Fourth class road
FRC5	F r c5	Fifth class road
FRC6	F r c6	Sixth class road
FRC7	F r c7	Other class road, lowest importance

Table 108— Values contained in the enumeration "OpenlrFunctionalRoadClassEnum"

#### A.7.41 The <<enumeration>> "OpenlrOrientationEnum"

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 "OpenlrOrientationEnum"

#### A.7.42 The <<enumeration>> "OpenlrSideOfRoadEnum"

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 "OpenlrSideOfRoadEnum"

#### A.7.43 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.7.44 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.7.45 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.7.46 The <<enumeration>> "PlacesEnum"**

List of types of places.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.7.47 The <<enumeration>> "PoorEnvironmentTypeEnum"**

Types of poor environmental conditions.

Enumerated value name	Designation	Definition
badWeather	Bad weather	Adverse weather conditions are affecting driving conditions.
blizzard	Blizzard	Heavy snowfall in combination with strong winds, limiting visibility to 50m or less.
blowingDust	Blowing dust	Dust blowing across the roadway causing significantly reduced visibility.
blowingSnow	Blowing snow	Fallen snow moving due to the forces of wind.
crosswinds	Crosswinds	Strong cross winds across the direction of the roadway (e.g. on a ridge or bridge).
damagingHail	Damaging hail	Large falling ice pellets or frozen rain capable of causing injury or damage to property.
denseFog	Dense fog	Dense fog, limiting visibility to 50m or less.
eclipse	Eclipse	Eclipse, either partial or full, of the sun causing low light levels during normal daylight period.
extremeCold	Extreme cold	Abnormally low temperatures.
extremeHeat	Extreme heat	Abnormally high expected maximum temperature.
fog	Fog	Fog, visibility more than 50m.
freezingFog	Freezing fog	Fog, in conjunction with sub-zero air temperatures causing possible freezing of road surface.
frost	Frost	Frost can be expected.
gales	Gales	Winds between 60 km/h and 90 km/h.
gustyWinds	Gusty winds	Constantly varying winds, significant at times.
hail	Hail	Falling ice pellets or frozen rain.
heavyFrost	Heavy frost	A thick coating of frost can be expected.
heavyRain	Heavy rain	Heavy rainfall, limiting visibility to 50m or less.
heavySnowfall	Heavy snowfall	Dense falling snow, limiting visibility to 50m or less.
hurricaneForceWinds	Hurricane force winds	Winds over 120 km/h.
lowSunGlare	Low sun glare	Difficult visibility conditions created by low elevation sunlight.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
moderateFog	Moderate fog	Misty conditions impairing vision over 100m.
ozonePollution	Ozone pollution	High concentrations of ozone are present.
patchyFog	Patchy fog	Fog, in which intermittent areas of dense fog may be encountered.
pollution	Pollution	Pollution of an unspecified nature.
precipitationInTheArea	Precipitation in the area	Unspecified precipitation is falling on the area.
rain	Rain	Rain, visibility more than 50m.
rainChangingToSnow	Rain changing to snow	Falling rain is changing to snow.
sandStorms	Sand storms	Sand blowing across the roadway causing significantly reduced visibility.
severeExhaustPollution	Severe exhaust pollution	Pollution from exhaust fumes has reached a level sufficient to cause concern.
severeSmog	Severe smog	Environmental warning of very poor air quality resulting from smog.
showers	Showers	Light rain or intermittent rain.
sleet	Sleet	Rain mingled with snow or hail.
smogAlert	Smog alert	Environmental warning of poor air quality resulting from smog.
smokeHazard	Smoke hazard	Smoke drifting across the roadway causing significantly reduced visibility.
snowChangingToRain	Snow changing to rain	Falling snow is changing to rain.
snowfall	Snowfall	Falling snow, visibility more than 50m.
sprayHazard	Spray hazard	Reduced visibility resulting from spray created by moving vehicles on a wet roadway.
stormForceWinds	Storm force winds	Winds between 90 km/h and 120 km/h.
strongGustsOfWind	Strong gusts of wind	Constantly varying winds, strong at times.
strongWinds	Strong winds	Winds between 40 km/h and 60 km/h.
swarmsOfInsects	Swarms of insects	Large numbers of insects which create a hazard for road users through reduced visibility.
temperatureFalling	Temperature falling	The temperature is falling significantly.

Enumerated value name	Designation	Definition
thunderstorms	Thunderstorms	Electrical storms, generally with heavy rain.
tornadoes	Tornadoes	Very violent, whirling windstorms affecting narrow strips of country.
veryStrongGustsOfWind	Very strong gusts of wind	Constantly varying winds, very strong at times.
visibilityReduced	Visibility reduced	Environmental conditions causing reduced visibility.
whiteOut	White out	Falling snow in blizzard conditions resulting in very reduced visibility.
winterStorm	Winter storm	Heavy rain, sleet, hail and/or snow in combination with strong winds, limiting visibility to 50m or less.

**Table 127— Values contained in the enumeration "PoorEnvironmentTypeEnum"**

**A.7.48 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.7.49 The <<enumeration>> "PublicEventTypeEnum"**

Types of public events.



<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.
<b>culturalEvent</b>	<b>Cultural event</b>	<b>Cultural event which could disrupt traffic.</b>
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.7.50 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"

Table 129— Values contained in the enumeration "ReferentTypeEnum"

**A.7.51 The <<enumeration>> "RelativeTrafficFlowEnum"**

Levels of assessment of the traffic flow conditions relative to normally expected conditions at this date/time.

Enumerated value name	Designation	Definition
trafficFlowNormal	Traffic flow normal	Traffic flow is normal at the specified location at this date/time.
trafficHeavierThanNormal	Traffic heavier than normal	Traffic is heavier than normally expected at the specified location at this date/time.
trafficLighterThanNormal	Traffic lighter than normal	Traffic is lighter than normally expected at the specified location at this date/time.
trafficVeryMuchHeavierThanNormal	Traffic very much heavier than normal	Traffic is very much heavier than normally expected at the specified location at this date/time.
trafficVeryMuchLighterThanNormal	Traffic very much lighter than normal	Traffic is very much lighter than normally expected at the specified location at this date/time.

**Table 130— Values contained in the enumeration "RelativeTrafficFlowEnum"**

## A.7.52 The <<enumeration>> "RoadMaintenanceTypeEnum"

Types of road maintenance.

Enumerated value name	Designation	Definition
clearanceWork	Clearance work	Clearance work of an unspecified nature.
controlledAvalanche	Controlled avalanche	Controlled avalanche work.
grassCuttingWork	Grass cutting work	Grass cutting work.
installationWork	Installation work	Installation of new equipments or systems on or along-side the roadway.
litterClearance	Litter clearance	Work to collect litter from the roadway and/or adjacent verges.
maintenanceWork	Maintenance work	Maintenance of road, associated infrastructure or equipments.
other	Other	Other than as defined in this enumeration.
overheadWorks	Overhead works	Works which are overhead of the carriageway.
repairWork	Repair work	Repair work to road, associated infrastructure or equipments.
resurfacingWork	Resurfacing work	Work associated with relaying or renewal of worn-out road surface (pavement).
roadMarkingWork	Road marking work	Striping and repainting of road markings, plus placement or replacement of reflecting studs (cats' eyes).
roadsideWork	Roadside work	Road side work of an unspecified nature.
roadworks	Roadworks	Road maintenance or improvement activity of an unspecified nature which may potentially cause traffic disruption.
roadworksClearance	Roadworks clearance	Roadworks are completed and are being cleared.
rockFallPreventativeMaintenance	Rock fall preventative maintenance	Rock fall preventative maintenance.
saltingInProgress	Salting in progress	Spreading of salt and / or grit on the road surface to prevent or melt snow or ice.
snowploughsInUse	Snowploughs in use	Snowploughs or other similar mechanical devices in use to clear snow from the road.
sweepingOfRoad	Sweeping of road	Sweeping of the roadway.
treeAndVegetationCuttingWork	Tree and vegetation cutting work	Tree and vegetation cutting work adjacent to the roadway.

**Table 132— Values contained in the enumeration "RoadMaintenanceTypeEnum"**

**A.7.53 The <<enumeration>> "ReroutingManagementTypeEnum"**

Management actions relating to rerouting.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.7.54 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.
clearALaneForSnowploughsAndGrittingVehicles	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.
doNotUseSpecifiedLanesOrCarriageways	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.
useOfSpecifiedLanesOrCarriagewaysAllowed	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.7.55 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.7.56 The <<enumeration>> "SourceTypeEnum"**

Type of sources from which situation information may be derived.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
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.7.57 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.7.58 The <<enumeration>> "SubjectTypeOfWorksEnum"**

Subject types of construction or maintenance work.



Enumerated value name	Designation	Definition
bridge	Bridge	Bridge on, over or under the highway.
buriedCables	Buried cables	Buried cables under or along the highway.
buriedServices	Buried services	Unspecified buried services on, under or along the highway.
crashBarrier	Crash barrier	Crash barrier.
gallery	Gallery	Gallery.
gantry	Gantry	Gantry over or above the roadway.
gasMainWork	Gas main work	Gas mains.
interchange	Interchange	Motorway or major road interchange.
junction	Junction	Motorway or major road junction.
levelCrossing	Level crossing	Level-crossing or associated equipment.
lightingSystem	Lighting system	Road lighting system.
measurementEquipment	Measurement equipment	Equipment used for determining traffic measurements.
noiseProtection	Noise protection	Installations along the roadway designed to reduce road noise in the surrounding environment.
other	Other	Other than as defined in this enumeration.
road	Road	Road.
roadsideDrains	Roadside drains	Roadside drains.
roadsideEmbankment	Roadside embankment	Roadside embankment.
roadsideEquipment	Roadside equipment	Roadside equipment.
roadSigns	Road signs	Road signs.
roundabout	Roundabout	Roundabout.
tollGate	Toll gate	Toll gate.
tunnel	Tunnel	Road tunnel.
waterMain	Water main	Water main under or along the highway.

Table 137— Values contained in the enumeration "SubjectTypeOfWorksEnum"

### A.7.59 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.7.60 The <<enumeration>> "TrafficFlowCharacteristicsEnum"

A collection of terms for describing the characteristics of traffic flow.

Enumerated value name	Designation	Definition
erraticFlow	Erratic flow	Traffic flow is of an irregular nature, subject to sudden changes in rates.
smoothFlow	Smooth flow	Traffic flow is smooth.
stopAndGo	Stop and go	Traffic flow is of a stop and go nature with queues forming and ending continuously on the specified section of road.
trafficBlocked	Traffic blocked	Traffic is blocked at the specified location and in the specified direction due to an unplanned event.

Table 139— Values contained in the enumeration "TrafficFlowCharacteristicsEnum"

### A.7.61 The <<enumeration>> "TrafficTrendTypeEnum"

List of terms used to describe the trend in traffic conditions.

Enumerated value name	Designation	Definition
trafficBuildingUp	Traffic building up	Traffic conditions are changing from free-flow to heavy or slow service levels. Queues may also be expected.
trafficEasing	Traffic easing	Traffic conditions are changing from heavy or slow service levels to free-flow.
trafficStable	Traffic stable	Traffic conditions are currently stable.
unknown	Unknown	The trend of traffic conditions is currently unknown.

**Table 140— Values contained in the enumeration "TrafficTrendTypeEnum"**

### A.7.62 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.7.63 The <<enumeration>> "TransitServiceInformationEnum"**

Types of public transport information.

<b>Enumerated value name</b>	<b>Designation</b>	<b>Definition</b>
cancellations	Cancellations	Public transport, park-and-ride, rail or bus services will be cancelled until the specified time.
delayDueToBadWeather	Delay due to bad weather	The specified service is delayed due to bad weather.
delayDueToRepairs	Delay due to repairs	The specified service is delayed due to the need for repairs.
delayedUntilFurtherNotice	Delayed until further notice	The specified public transport service will be delayed until further notice.
delaysDueToFlotsam	Delays due to flotsam	The departure of the specified ferry service is delayed due to flotsam.
departureOnSchedule	Departure on schedule	The departure of the specified service is on schedule.
ferryReplacedByIceRoad	Ferry replaced by ice road	The ferry service has been replaced by an ice road.
freeShuttleServiceOperating	Free shuttle service operating	A shuttle service is operating at no charge between specified locations until the specified time.
informationServiceNotAvailable	Information service not available	The information service relating to the specified transport system is not currently available.
irregularServiceDelays	Irregular service delays	The specified service is subject to irregular delays.
loadCapacityChanged	Load capacity changed	The load capacity for the specified service has been changed.
other	Other	Other than as defined in this enumeration.
restrictionsForLongerVehicles	Restrictions for longer vehicles	Long vehicles are subject to restrictions on the specified service.
serviceDelays	Service delays	The specified service is subject to delays.
serviceDelaysOfUncertainDuration	Service delays of uncertain duration	The specified service is subject to delays whose predicted duration cannot be estimated accurately.
serviceFullyBooked	Service fully booked	The departure of the specified service is fully booked.

Enumerated value name	Designation	Definition
serviceNotOperating	Service not operating	The specified service is not operating until the specified time.
serviceNotOperatingSubstituteServiceAvailable	Service not operating substitute service available	The specified service is not operating but an alternative service is available.
serviceSuspended	Service suspended	The specified service has been suspended until the specified time.
serviceWithdrawn	Service withdrawn	The specified service has been cancelled.
shuttleServiceOperating	Shuttle service operating	A shuttle service is operating between the specified locations until the specified time.
temporaryChangesToTimetables	Temporary changes to timetables	The timetable for the specified service is subject to temporary changes.

**Table 142— Values contained in the enumeration "TransitServiceInformationEnum"**

#### **A.7.64 The <<enumeration>> "TransitServiceTypeEnum"**

Types of transport services available to the general public.

Enumerated value name	Designation	Definition
air	Air	Air service.
bus	Bus	Bus service.
ferry	Ferry	Ferry service.
hydrofoil	Hydrofoil	Hydrofoil service.
rail	Rail	Rail service.
tram	Tram	Tram service.
undergroundMetro	Underground metro	Underground or metro service.

**Table 143— Values contained in the enumeration "TransitServiceTypeEnum"**

### A.7.65 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.7.66 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.7.67 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.7.68 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.7.69 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.

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

**Table 129— Values contained in the enumeration "VehicleTypeEnum"**

### **A.7.70 The <<enumeration>> "WeatherRelatedRoadConditionTypeEnum"**

Types of road surface conditions which are related to the weather.



Enumerated value name	Designation	Definition
blackIce	Black ice	Severe skid risk due to black ice (i.e. clear ice, which is impossible or very difficult to see).
deepSnow	Deep snow	Deep snow on the roadway.
dry	Dry	The road surface is dry.
freezingOfWetRoads	Freezing of wet roads	The wet road surface is subject to freezing.
freezingPavements	Freezing pavements	The pavements for pedestrians are subject to freezing.
freezingRain	Freezing rain	Severe skid risk due to rain falling on sub-zero temperature road surface and freezing.
freshSnow	Fresh snow	Fresh snow (with little or no traffic yet) on the roadway.
ice	Ice	Increased skid risk due to ice (of any kind).
iceBuildUp	Ice build up	Ice is building up on the roadway causing a serious skid hazard.
iceWithWheelBarTracks	Ice with wheel bar tracks	Ice on the road frozen in the form of wheel tracks.
icyPatches	Icy patches	Severe skid risk due to icy patches (i.e. intermittent ice on roadway).
looseSnow	Loose snow	Powdery snow on the road which is subject to being blown by the wind.
normalWinterConditionsForPedestrians	Normal winter conditions for pedestrians	Conditions for pedestrians are consistent with those normally expected in winter.
other	Other	Other than as defined in this enumeration.
packedSnow	Packed snow	Packed snow (heavily trafficked) on the roadway.
roadSurfaceMelting	Road surface melting	The road surface is melting, or has melted due to abnormally high temperatures.
slipperyRoad	Slippery road	The road surface is slippery due to bad weather conditions.
slushOnRoad	Slush on road	Increased skid risk due to melting snow (slush) on road.
slushStrings	Slush strings	Melting snow (slush) on the roadway is formed into wheel tracks.

Enumerated value name	Designation	Definition
snowDrifts	Snow drifts	Snow drifting is in progress or patches of deep snow are present due to earlier drifting.
snowOnPavement	Snow on pavement	Snow is on the pedestrian pavement.
snowOnTheRoad	Snow on the road	Snow is lying on the road surface.
surfaceWater	Surface water	Water is resting on the roadway which provides an increased hazard to vehicles.
wet	Wet	Road surface is wet.
wetAndIcyRoad	Wet and icy road	Increased skid risk due to partly thawed, wet road with packed snow and ice, or rain falling on packed snow and ice.
wetIcyPavement	Wet icy pavement	Partly thawed, wet pedestrian pavement with packed snow and ice, or rain falling on packed snow and ice.

Table 149— Values contained in the enumeration "WeatherRelatedRoadConditionTypeEnum"

#### A.7.71 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.7.72 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"

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