

Version 2.0

ASFINAG provides DATEX II traffic data of Austrian motorways and highways for service providers and other interested institutions.

The unplanned events contain basic information such as event type, version, update time, validity duration, event text, and event location. Figure 1 shows the structure of an unplanned event in DATEX II.



The *situation* element contains an arbitrary number of *situationRecord* sub-elements which contain the actual traffic information, for example information that describes a traffic jam or an accident. The *SituationRecord* element also includes the *validityTimeSpecification* element. The *overallStartTime* represents the begin timestamp of the traffic situation and the *overallEndTime* the estimated end timestamp of the traffic situation.

Example 1: Consecutive unplanned events with the same id and increased version number.

The following example shows an event of type accident that caused a traffic jam of 5km.

```
<ns:situation id="8925900" version="17">
  <ns:headerInformation>
    <ns:confidentiality>noRestriction</ns:confidentiality>
    <ns:informationStatus>real</ns:informationStatus>
  </ns:headerInformation>
  <ns:situationRecord d2pl:type="ns:Accident" id="8925900_351" version="17">
    <ns:situationRecordCreationTime>2017-11-29T08:32:09+01:00</ns:situationRecordCreationTime>
    <ns:situationRecordVersionTime>2017-11-29T10:07:32+01:00</ns:situationRecordVersionTime>
    <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
    <ns:validity>
    <ns:generalPublicComment>
    <ns:generalPublicComment>
      <ns:comment>
        <ns:values>
          <ns:value lang="en">between Bludenz-Nüziders
            (km 57) and Nenzing-Bludesch (km 50) at km 51,
            at construction site, accident, 5 km traffic jam</ns:value>
        </ns:values>
      </ns:comment>
    </ns:generalPublicComment>
    <ns:groupOfLocations d2pl:type="ns:Linear">
    <ns:situationRecordExtension>
    <ns:accidentType>other</ns:accidentType>
  </ns:situationRecord>
  <ns:situationRecord d2pl:type="ns:AbnormalTraffic" id="8925900_105" version="17">
    <ns:situationRecordCreationTime>2017-11-29T08:32:09+01:00</ns:situationRecordCreationTime>
    <ns:situationRecordVersionTime>2017-11-29T10:07:32+01:00</ns:situationRecordVersionTime>
    <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
    <ns:severity>high</ns:severity>
    <ns:validity>
    <ns:generalPublicComment>
    <ns:generalPublicComment>
      <ns:comment>
        <ns:values>
          <ns:value lang="en"> between Bludenz-Nüziders
            (km 57) and Nenzing-Bludesch (km 50) at km 51,
            at construction site, accident, 5 km traffic jam</ns:value>
        </ns:values>
      </ns:comment>
    </ns:generalPublicComment>
    <ns:groupOfLocations d2pl:type="ns:Linear">
    <ns:situationRecordExtension>
    <ns:abnormalTrafficType>stationaryTraffic</ns:abnormalTrafficType>
    <ns:queueLength>5000</ns:queueLength>
  </ns:situationRecord>
</ns:situation>
```

In the above example the version "17" of situation "8925900" contains two situation records: 1) Accident and 2) AbnormalTraffic.

```

<ns:situation id="8925900" version="18">
  <ns:headerInformation>
    <ns:confidentiality>noRestriction</ns:confidentiality>
    <ns:informationStatus>real</ns:informationStatus>
  </ns:headerInformation>
  <ns:situationRecord d2pl:type="ns:AbnormalTraffic" id="8925900_104" version="18">
    <ns:situationRecordCreationTime>2017-11-29T08:32:09+01:00</ns:situationRecordCreationTime>
    <ns:situationRecordVersionTime>2017-11-29T10:45:57+01:00</ns:situationRecordVersionTime>
    <ns:probabilityOfOccurrence>certain</ns:probabilityOfOccurrence>
    <ns:severity>high</ns:severity>
    <ns:validity>


---


    <ns:generalPublicComment>


---


    <ns:generalPublicComment>
      <ns:comment>
        <ns:values>
          <ns:value lang="en">between Bludenz-Nüziders (km 57) and
            Nenzing-Bludesch (km 50) at km 51, at construction site,
            Stationary traffic due to earlier accident,
            3 km traffic jam
          </ns:value>


---


        </ns:values>
      </ns:comment>
    </ns:generalPublicComment>
    <ns:groupOfLocations d2pl:type="ns:Linear">


---


    <ns:situationRecordExtension>


---


    <ns:abnormalTrafficType>stationaryTraffic</ns:abnormalTrafficType>
    <ns:queueLength>3000</ns:queueLength>
  </ns:situationRecord>
</ns:situation>

```

After an update the situation “8925900” has version “18” and the traffic information has also been updated. Since the accident has been cleared, the situation has only one situation record of type “AbnormalTraffic”. Moreover, the queue length of the traffic jam has changed.

A.2 Traffic Situation Types

All the unplanned events are provided within the DATEX II *situation* element. The situation element contains the attributes *id* and *version*. Furthermore it also contains an arbitrary number of *situationRecord* sub-elements which contain the actual traffic information. The *situationRecord* is an abstract class and contains several sub types. Each situation record sub type describes the class of the unplanned event. An overview about the provided *situationRecord* sub types (the abstract types are not shown) is shown in **Table 1**.

| situationRecord type | Description |
|---------------------------|--|
| AbnormalTraffic | A traffic condition which is not normal. Used in case of stationary or slow traffic. Further information is provided by the elements <i>abnormalTrafficType</i> and <i>queueLength</i> . |
| 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. Further information on the type of accident is provided by the element <i>accidentType</i> . |
| AnimalPresenceObstruction | An obstruction on the road resulting from the presence of animals. |
| AuthorityOperation | Authority initiated operation or activity that could disrupt traffic. |
| Conditions | Any conditions which have the potential to degrade normal driving conditions. |
| DisturbanceActivity | Deliberate human action of either a public disorder nature or of a situation alert type which could disrupt traffic. |
| EnvironmentalObstruction | An obstruction on the road resulting from an environmental cause, such as flooding, fallenTrees or avalanches. Further information on the type of environmental obstruction is provided by the element <i>environmentalObstructionType</i> . |
| EquipmentOrSystemFault | Equipment or system which is faulty, malfunctioning or not in a fully operational state that may be of interest or concern to road operators and road users. For example: in the case of a malfunctioning tunnel ventilation, the <i>faultyEquipmentOrSystemType</i> element is set to "tunnelVentilation" and the <i>equipmentOrSystemFaultType</i> is set to "notWorking". |

| | |
|-----------------------------------|--|
| GeneralObstruction | Any stationary or moving obstacle of a physical nature, other than of an animal, vehicle, environmental, or damaged equipment nature. For example lane closures, road closures, recovery and rescue operations. Additional information is provided using the element <i>roadOrCarriagewayOrLaneManagementType</i> . |
| InfrastructureDamageObstruction | An obstruction on the road resulting from the failure or damage of infrastructure on, under, above or close to the road. |
| MaintenanceWorks | Roadworks involving the maintenance or installation of infrastructure. Optionally, also provides the information about the subjects on which the works are carried out. For example: the element <i>subjectTypeOfWorks</i> is set to "bridge" if the roadworks involves the maintenance or installation of a bridge. |
| NonWeatherRelatedRoadConditions | Road surface conditions that are not related to the weather but which may affect driving conditions. |
| PoorEnvironmentConditions | Any environmental conditions which may be affecting the driving conditions on the road, such as heavy rain, snowfall or dense fog. Further information is provided by the element <i>poorEnvironmentType</i> . |
| RoadOrCarriagewayOrLaneManagement | Road, carriageway or lane management action that is instigated by the network/road operator. Further information is provided by the element <i>roadOrCarriagewayOrLaneManagementType</i> . |
| VehicleObstruction | An obstruction on the road caused by one or more vehicles such as a broken down vehicle, broken down heavy lorry or vehicle on fire. Further information is provided by the element <i>vehicleObstructionType</i> . |
| WeatherRelatedRoadConditions | Road surface conditions that are related to the weather which may affect the driving conditions, such as ice, snow or water. Further information is provided by the element <i>weatherRelatedRoadConditionType</i> . |

Table 1: Situation record types supported by the Austrian unplanned events profile

A.3 Location Referencing

ASFINAG provides a number of location referencing methods for locating the unplanned events as described in Table 2. All locations are provided as linear by two points (start point and end point). Note, that in case of single point locations the end point contains the same value as the start point (i.e., start=end). An overview about the provided location referencing methods is shown in Table 2.

| Location Referencing | DATEX II element | Description |
|-----------------------|----------------------------------|--|
| AlertC location codes | alertCLinear | The <i>alertCLinear</i> element contains the primary location code, secondary location code, AlertC direction, and offset distances of the corresponding primary and secondary location. |
| ASFINAG road km | directionRelativeOnLinearSection | The <i>directionRelativeOnLinearSection</i> element contains the road km location as referenced by ASFINAG. Any point on the ASFINAG road network is described by road number, direction and road km provided in meters. |
| WGS84 | linearByCoordinates | The <i>linearByCoordinates</i> element contains the latitude/longitude values of start and end points. |
| GIP | GIPLink | Location reference of GIP (Graph Integration Platform). GIP provides a digital map of Austria's transport network to all authorities. |

Table 2: Location referencing

A.4 Alert-C to DATEX II Mapping

Alert-C event codes are frequently used for transmitting traffic messages over TMC. So for events that contain Alert-C event codes, we have provided a mapping file to map an Alert-C event code to relevant data elements in the SituationRecord. Please refer to the file “Alert-C_EventCode_DATEXII.xlsx” file for the mappings. Note that some of the Alert-C event codes, are mapped to two DATEX II situation records. This is also indicated in the mapping file.

A.5 Extensions

The Level B extensions for Austrian unplanned events profile are summarised in this section.

A.5.1 PayloadPublicationExtensions

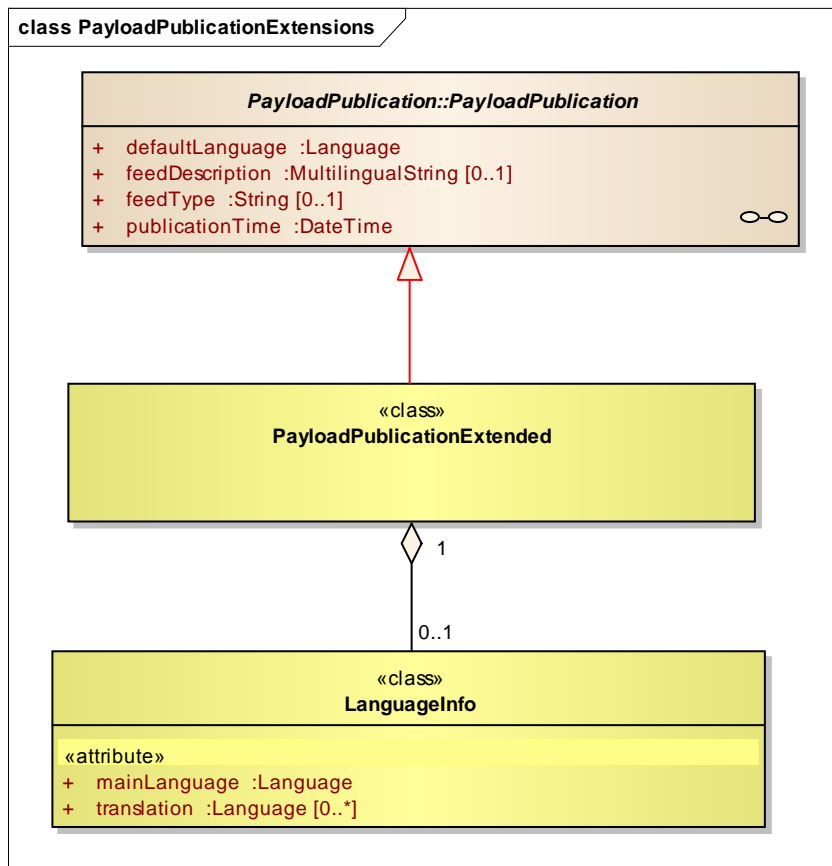


Figure A.5.1.1 Extension for PayloadPublication

The following classes are added to the PayloadPublication class:

- **LanguageInfo:** - Specifies the main language and the available translations in which the textual information is encoded. For example, using MultilingualString class a single text can be described in multiple languages. Using the language info the receiver can identify the source language and the translations of the textual content of the event.

A.5.2 SituationRecordExtensions

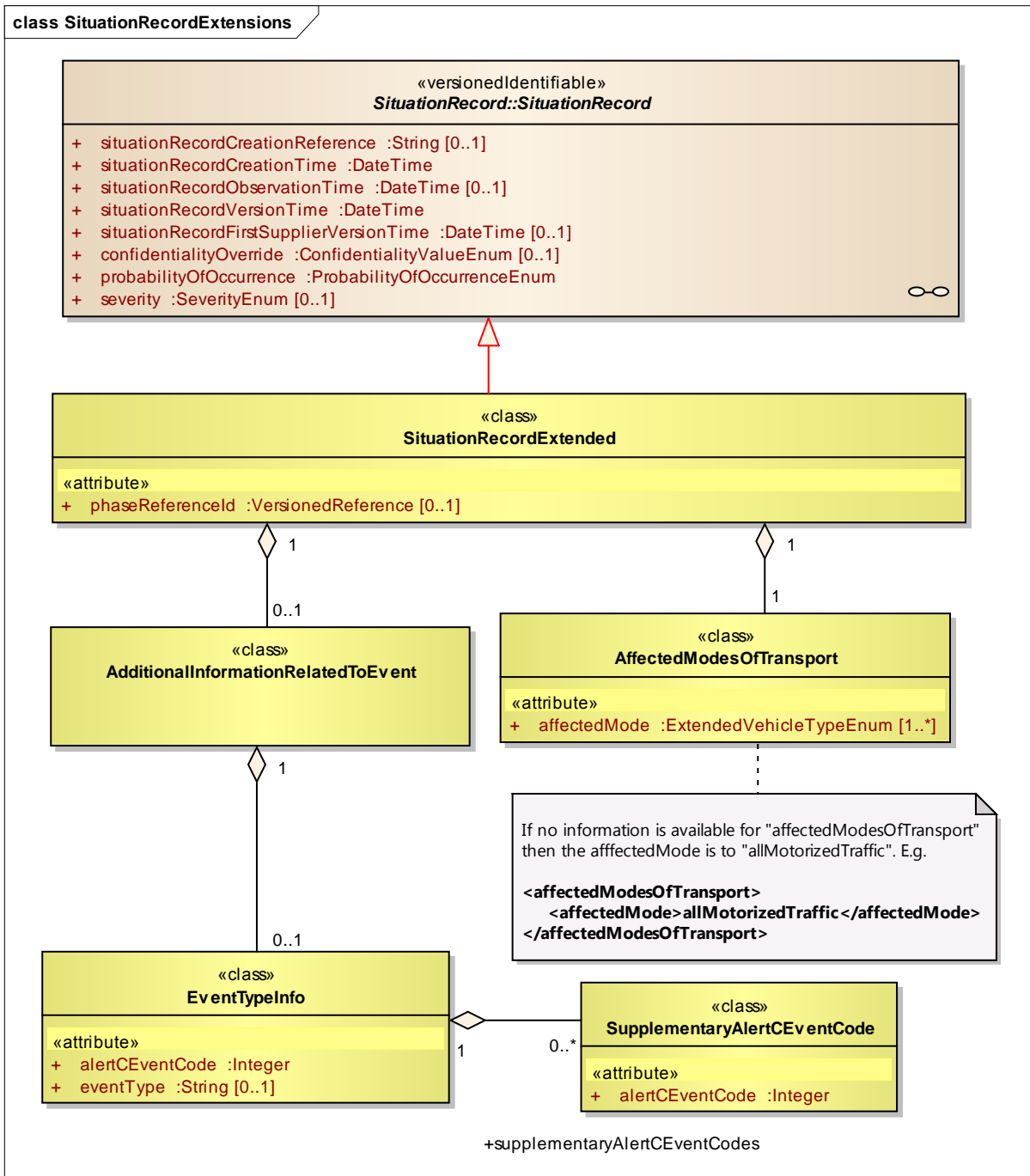


Figure A.5.2.1 Extensions for SituationRecord

The following classes are added to the SituationRecord class:

- **AdditionalInformationRelatedToEvent:** - Specifies the additional details of an event that are not covered by the data elements of the SituationRecord. Information such as Alert-C event codes and supplementary Alert-C event codes are specified.
- **AffectedModesOfTransport:** - Specifies the modes of transportation that are affected by the event. Such as trucks, cars, buses, trucks over 7.5 tons, etc.,

A.5.3 GroupOfLocationsExtensions

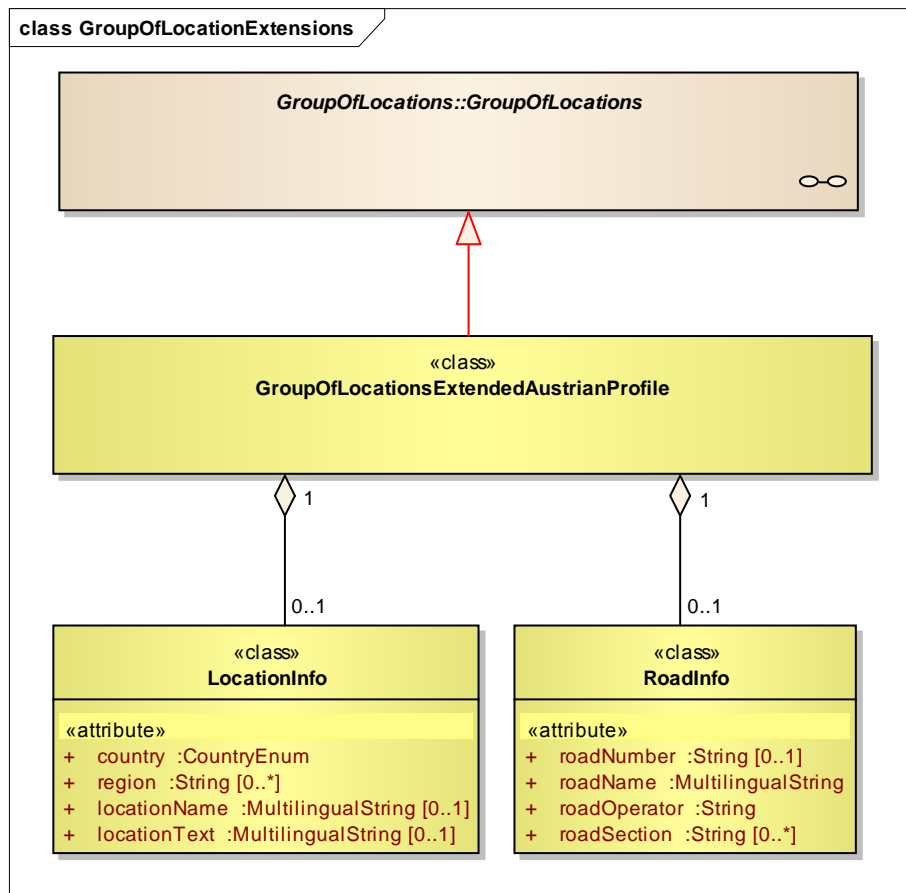


Figure A.5.3.1 Extensions for GroupOfLocations

The following classes are added to the `GroupOfLocations` class:

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

A.5.4 GipLinkExtensions

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

A.5.4.1 GipLinkLinearExtension

This extension specifies the linear location of an unplanned event by one or more GIP links.

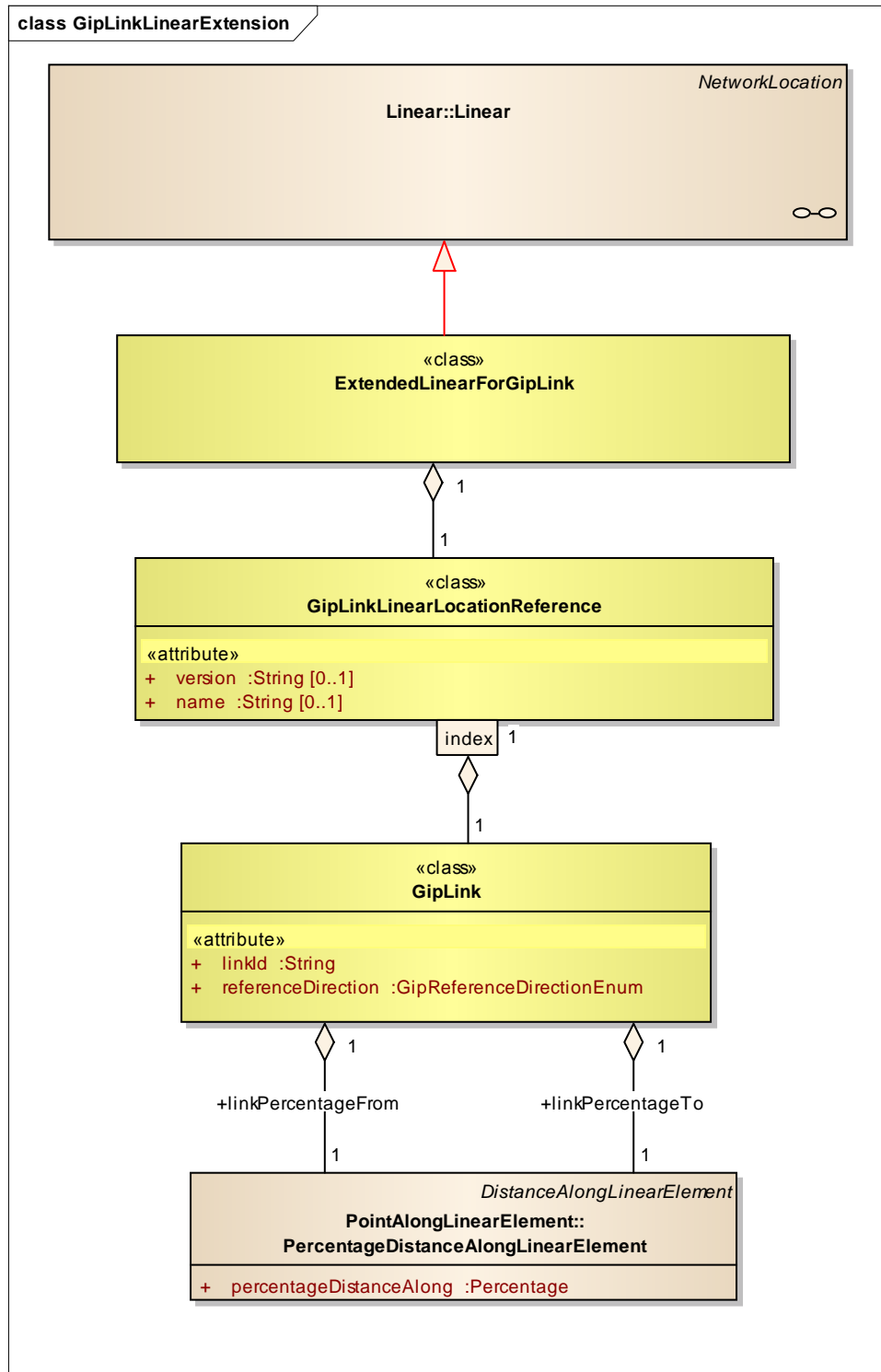


Figure A.5.4.1.1 GipLinkLinear extension

A.5.4.2 GipLinkItineraryExtension

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

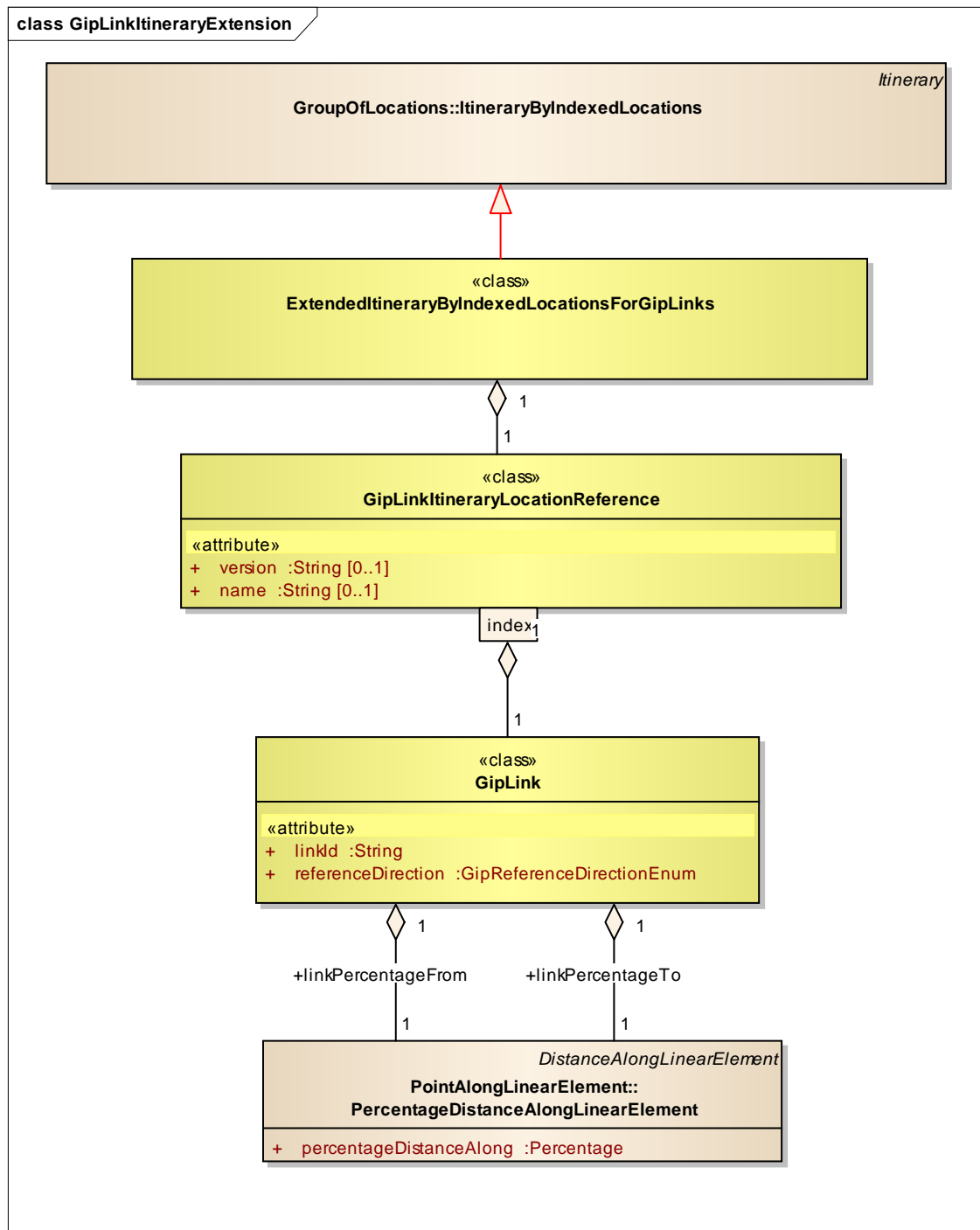


Figure A.5.4.2.1 GipLinkItinerary extension

A.5.4.3 GipLinkPointExtension

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

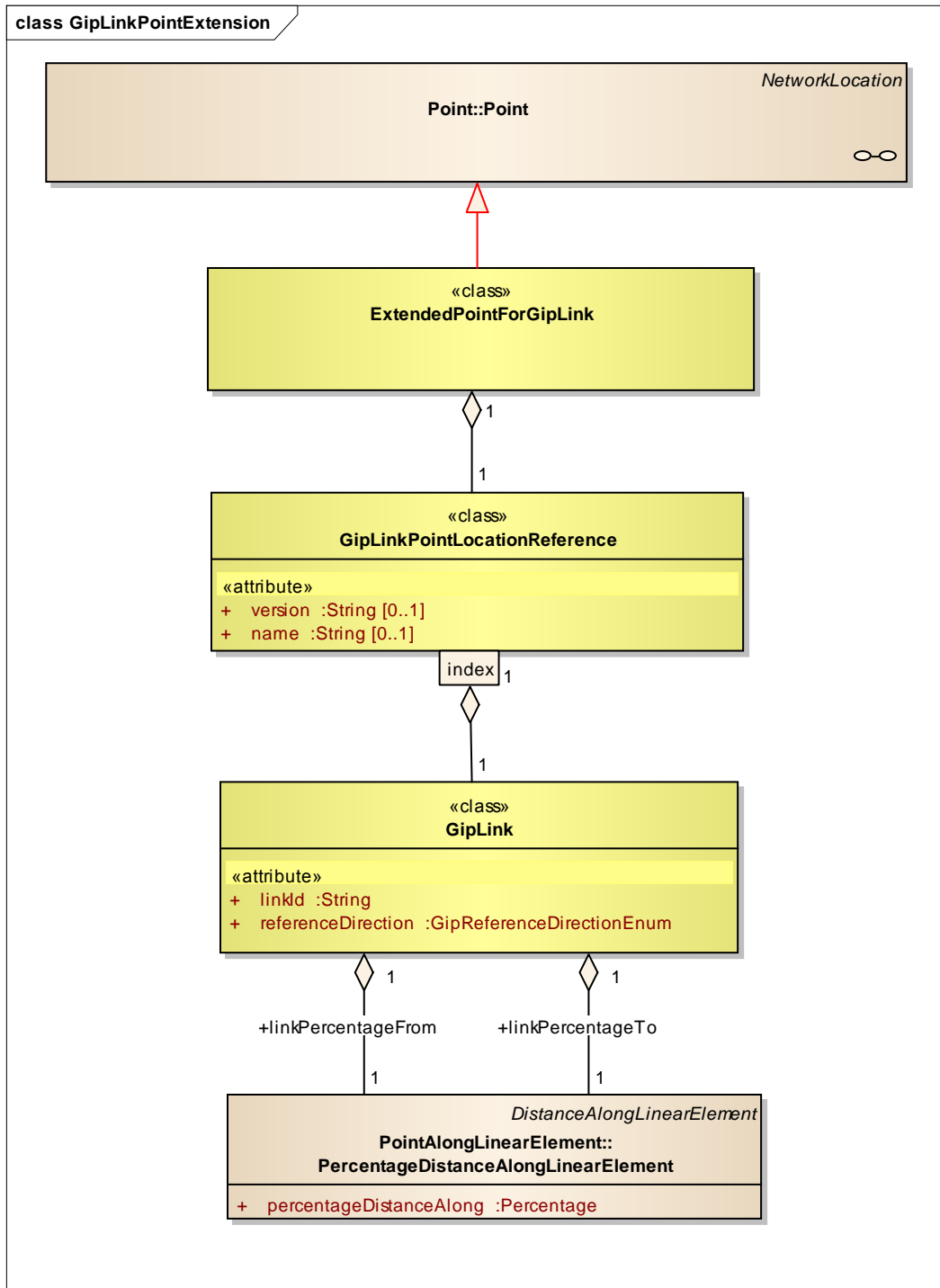


Figure A.5.4.3.1 GipLinkPoint extension

A.5.5 LinearByCoordinates

The linearByCoordinates extension is not a proprietary extension from ASFINAG. It has been available on the datex2.eu¹ platform, and it is imported into the Austrian profiles. This extension allows to specify linear locations by a number of points represented by coordinates. There must be a start and an end point with an arbitrary number of intermediate points. The provision of intermediate points are optional.

¹ <http://www.datex2.eu/content/linear-coordinates>

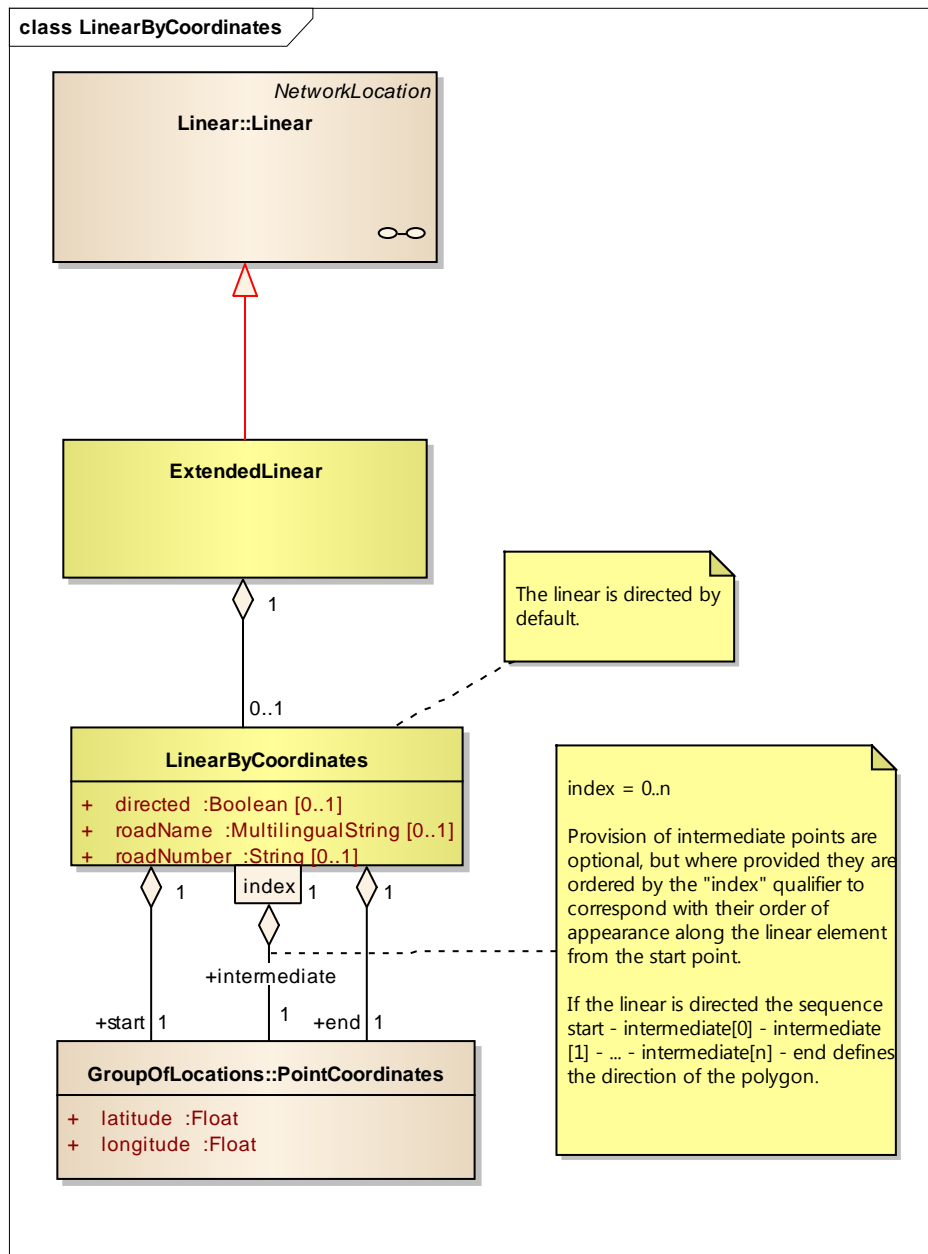


Figure A.5.5.1 LinearByCoordinates extension

A.6 Data Dictionary for "AustrianUnplannedEventsProfile"

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

A.6.1 "Accident" package

A.6.1.1 "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 3— Classes of the "Accident" package

A.6.1.2 "Accident" package association roles

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

| Class name | Role name | Designation | Definition | Multiplicity | Target |
|------------|-----------|-------------|------------|--------------|--------|
|------------|-----------|-------------|------------|--------------|--------|

Table 4— Associations of the "Accident" package

A.6.1.3 "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 5— Attributes of the "Accident" package

A.6.2 "Activity" package

A.6.2.1 "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 |
| AuthorityOperation | Authority operation | Authority initiated operation or activity that could disrupt traffic. | | no |
| DisturbanceActivity | Disturbance activity | Deliberate human action of either a public disorder nature or of a situation alert type which could disrupt traffic. | | no |

Table 6— Classes of the "Activity" package

A.6.2.2 "Activity" package association roles

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

| Class name | Role name | Designation | Definition | Multiplicity | Target |
|------------|-----------|-------------|------------|--------------|--------|
|------------|-----------|-------------|------------|--------------|--------|

Table 7— Associations of the "Activity" package

A.6.2.3 "Activity" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|---------------------|-------------------------|---------------------------|---|--------------|-----------------------------|
| AuthorityOperation | authorityOperationType | Authority operation type | Type of authority initiated operation or activity that could disrupt traffic. | 1..1 | AuthorityOperationTypeEnum |
| 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 |

Table 8— Attributes of the "Activity" package

A.6.3 "AlertCMethod2Linear" package

A.6.3.1 "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 9— Classes of the "AlertCMethod2Linear" package

A.6.3.2 "AlertCMethod2Linear" package association roles

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

A.6.3.3 "AlertCMethod2Linear" package attributes

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

A.6.4 "AlertCMethod2Point" package

A.6.4.1 "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 10— Classes of the "AlertCMethod2Point" package

A.6.4.2 "AlertCMethod2Point" package association roles

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

A.6.4.3 "AlertCMethod2Point" package attributes

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

A.6.5 "AlertCMethod4Linear" package

A.6.5.1 "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 11— Classes of the "AlertCMethod4Linear" package

A.6.5.2 "AlertCMethod4Linear" package association roles

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

A.6.5.3 "AlertCMethod4Linear" package attributes

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

A.6.6 "AlertCMethod4Point" package

A.6.6.1 "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 12— Classes of the "AlertCMethod4Point" package

A.6.6.2 "AlertCMethod4Point" package association roles

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

A.6.6.3 "AlertCMethod4Point" package attributes

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

A.6.7 "Conditions" package

A.6.7.1 "Conditions" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|---------------------------------|-------------------------------------|---|------------|----------|
| Conditions | Conditions | Any conditions which have the potential to degrade normal driving conditions. | | no |
| NonWeatherRelatedRoadConditions | Non weather related road conditions | Road surface conditions that are not related to the weather but which may affect driving conditions. | | no |
| PoorEnvironmentConditions | Poor environment conditions | Any environmental conditions which may be affecting the driving conditions on the road. | | no |
| RoadConditions | Road conditions | Conditions of the road surface which may affect driving conditions. These may be related to the weather (e.g. ice, snow etc.) or to other conditions (e.g. oil, mud, leaves etc. on the road) | | yes |
| WeatherRelatedRoadConditions | Weather related road conditions | Road surface conditions that are related to the weather which may affect the driving conditions, such as ice, snow or water. | | no |

Table 13— Classes of the "Conditions" package

A.6.7.2 "Conditions" package association roles

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

A.6.7.3 "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 |
| NonWeatherRelatedRoadConditions | nonWeatherRelatedRoadConditionType | Non weather related road condition type | The type of road conditions which are not related to the weather. | 1..* | NonWeatherRelatedRoadConditionTypeEnum |
| PoorEnvironmentConditions | poorEnvironmentType | Poor environment type | The type of environment condition which is affecting driving conditions. | 1..* | PoorEnvironmentTypeEnum |
| WeatherRelatedRoadConditions | weatherRelatedRoadConditionType | Weather related road condition type | The type of road surface condition that is related to the weather which is affecting the driving conditions. | 1..* | WeatherRelatedRoadConditionTypeEnum |

Table 14— Attributes of the "Conditions" package

A.6.8 "Exchange" package

A.6.8.1 "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 15— Classes of the "Exchange" package

A.6.8.2 "Exchange" package association roles

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

Table 16— Associations of the "Exchange" package

A.6.8.3 "Exchange" package attributes

There are no attributes in the Exchange package

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------|----------------|-------------|------------|--------------|------|
|------------|----------------|-------------|------------|--------------|------|

Table 17— Attributes of the "Exchange" package

A.6.9 "GipLinkExtensions" package

A.6.9.1 "GipLinkExtensions" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|--|---|---|------------|----------|
| ExtendedItineraryByIndexedLocationsForGipLinks | Extended itinerary by indexed locations for gip links | Extension for providing an itinerary of gip links | | no |
| ExtendedLinearForGipLink | Extended linear for gip link | An extension for GipLink linear location reference | | no |
| ExtendedPointForGipLink | Extended point for gip link | An extension for Point to provide GipLink information | | no |
| GipLink | Gip link | A GIPLink object | | no |
| GipLinkItineraryLocationReference | Gip link itinerary location reference | Contains an arbitrary number of gip links | | no |
| GipLinkLinearLocationReference | Gip link linear location reference | Contains one or more gip links that are part of a linear location | | no |
| GipLinkPointLocationReference | Gip link point location reference | Contains one or more Gip links that are part of a point location | | no |

Table 18— Classes of the "GipLinkExtensions" package

A.6.9.2 "GipLinkExtensions" package association roles

| Class name | Role name | Designation | Definition | Multiplicity | Target |
|------------|--------------------|----------------------|-------------|--------------|--------------------------------------|
| GipLink | linkPercentageFrom | Link percentage from | From offset | 1..1 | PercentageDistanceAlongLinearElement |
| | linkPercentageTo | Link percentage to | To offset | 1..1 | PercentageDistanceAlongLinearElement |

Table 19— Associations of the "GipLinkExtensions" package

A.6.9.3 "GipLinkExtensions" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|-----------------------------------|--------------------|---------------------|------------------------------------|--------------|---------------------------|
| GipLink | linkId | Link id | Identifier of the GipLink | 1..1 | String |
| | referenceDirection | Reference direction | Reference direction | 1..1 | GipReferenceDirectionEnum |
| GipLinkItineraryLocationReference | name | Name | Name of the provided GIP | 0..1 | String |
| | version | Version | Version of the provided GIP links. | 0..1 | String |
| GipLinkLinearLocationReference | name | Name | Name of the provided GIP | 0..1 | String |
| | version | Version | Version of the provided GIP links. | 0..1 | String |
| GipLinkPointLocationReference | name | Name | Name of the provided GIP | 0..1 | String |
| | version | Version | Version of the provided GIP links. | 0..1 | String |

Table 20— Attributes of the "GipLinkExtensions" package

A.6.10 "GroupOfLocationExtensions" package

A.6.10.1 "GroupOfLocationExtensions" package classes

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

Table 21— Classes of the "GroupOfLocationExtensions" package

A.6.10.2 "GroupOfLocationExtensions" package association roles

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

A.6.10.3 "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 22— Attributes of the "GroupOfLocationExtensions" package

A.6.11 "GroupOfLocations" package

A.6.11.1 "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 |

| Class name | Designation | Definition | Stereotype | Abstract |
|------------------------------------|--------------------------------------|---|------------|----------|
| NetworkLocation | Network location | The specification of a location on a network (as a point or a linear location). | | yes |
| 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 23— Classes of the "GroupOfLocations" package

A.6.11.2 "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 24— Associations of the "GroupOfLocations" package

A.6.11.3 "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 |
| | lane | Lane | Indicates the specific lane to which the location relates. | 0..* | LaneEnum |
| 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. | 1..1 | VersionedReference |
| 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 |

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------------------------------|----------------------|------------------------|--|--------------|----------------------------|
| | 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 25— Attributes of the "GroupOfLocations" package

A.6.12 "Impact" package

A.6.12.1 "Impact" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|------------|-------------|---|------------|----------|
| Delays | Delays | The details of the delays being caused by the situation element defined in the situation record. It is recommended to only use one of the optional attributes to avoid confusion. | | no |
| 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 26— Classes of the "Impact" package

A.6.12.2 "Impact" package association roles

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

A.6.12.3 "Impact" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------|--------------------------|-----------------------------|--|--------------|-----------------------------|
| Delays | 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 | 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 |
| | 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 27— Attributes of the "Impact" package

A.6.13 "Linear" package

A.6.13.1 "Linear" package classes

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

Table 28— Classes of the "Linear" package

A.6.13.2 "Linear" package association roles

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

A.6.13.3 "Linear" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|--------------|----------------------------|--------------------------------|---|--------------|--------|
| AlertCLinear | alertCLocationCountryCode | 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 29— Attributes of the "Linear" package

A.6.14 "LinearByCoordinates" package

A.6.14.1 "LinearByCoordinates" package classes

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

Table 30— Classes of the "LinearByCoordinates" package

A.6.14.2 "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 31— Associations of the "LinearByCoordinates" package

A.6.14.3 "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 32— Attributes of the "LinearByCoordinates" package

A.6.15 "LinearWithinLinearElement" package

A.6.15.1 "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 33— Classes of the "LinearWithinLinearElement" package

A.6.15.2 "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 34— Associations of the "LinearWithinLinearElement" package

A.6.15.3 "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 35— Attributes of the "LinearWithinLinearElement" package

A.6.16 "Management" package

A.6.16.1 "Management" package classes

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

Table 36— Classes of the "Management" package

A.6.16.2 "Management" package association roles

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

A.6.16.3 "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 37— Attributes of the "Management" package

A.6.17 "NetworkManagement" package

A.6.17.1 "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 38— Classes of the "NetworkManagement" package

A.6.17.2 "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 |
| ReroutingManagement | alternativeRoute | Alternative route | The definition of the alternative route (rerouting) specified as an ordered set of locations (itinerary) which may be specific to one or more defined destinations. | 0..* | Itinerary |

Table 39— Associations of the "NetworkManagement" package

A.6.17.3 "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 | entry | Entry | The specified entry on to another road at which the alternative route commences. | 0..1 | String |
| | exit | Exit | The specified exit from the normal route/road at which the alternative route commences. | 0..1 | String |

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|-----------------------------------|---------------------------------------|---|---|--------------|---|
| | 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 |
| | roadOrJunctionNumber | Road or junction number | The intersecting road or the junction at which the alternative route commences. | 0..1 | String |
| | signedRerouting | Signed rerouting | Indication of whether the rerouting is signed. | 0..1 | Boolean |
| RoadOrCarriagewayOrLaneManagement | 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 40— Attributes of the "NetworkManagement" package

A.6.18 "NonRoadEventInformation" package

A.6.18.1 "NonRoadEventInformation" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|-------------------------|----------------------------|---|------------|----------|
| CarParks | Car parks | Provides information on the status of one or more car parks. | | no |
| 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 |
| TransitInformation | Transit information | The availability of transit services and information relating to their departures. This is limited to those transit services which are of direct relevance to road users, e.g. connecting rail or ferry services. | | no |

Table 41— Classes of the "NonRoadEventInformation" package

A.6.18.2 "NonRoadEventInformation" package association roles

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

A.6.18.3 "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 |
| TransitInformation | transitServiceInformation | Transit service information | Information about transit services. | 1..1 | TransitServiceInformationEnum |
| | transitServiceType | Transit service type | The type of transit service to which the information relates. | 1..1 | TransitServiceTypeEnum |

Table 42— Attributes of the "NonRoadEventInformation" package

A.6.19 "Obstruction" package

A.6.19.1 "Obstruction" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|---------------------------------|-----------------------------------|---|------------|----------|
| AnimalPresenceObstruction | Animal presence obstruction | An obstruction on the road resulting from the presence of animals. | | no |
| EnvironmentalObstruction | Environmental obstruction | An obstruction on the road resulting from an environmental cause. | | no |
| GeneralObstruction | General obstruction | Any stationary or moving obstacle of a physical nature, other than of an animal, vehicle, environmental, or damaged equipment nature. | | no |
| InfrastructureDamageObstruction | Infrastructure damage obstruction | An obstruction on the road resulting from the failure or damage of infrastructure on, under, above or close to the road. | | 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 43— Classes of the "Obstruction" package

A.6.19.2 "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 |

Table 44— Associations of the "Obstruction" package

A.6.19.3 "Obstruction" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|---------------------------------|------------------------------|--------------------------------|--|--------------|----------------------------------|
| AnimalPresenceObstruction | animalPresenceType | Animal presence type | Indicates the nature of animals present on or near the roadway. | 1..1 | AnimalPresenceTypeEnum |
| EnvironmentalObstruction | environmentalObstructionType | Environmental obstruction type | Characterization of an obstruction on the road resulting from an environmental cause. | 1..1 | EnvironmentalObstructionTypeEnum |
| GeneralObstruction | obstructionType | Obstruction type | Characterization of the type of general obstruction. | 1..* | ObstructionTypeEnum |
| InfrastructureDamageObstruction | infrastructureDamageType | Infrastructure damage type | Characterization of an obstruction on the road resulting from the failure or damage of infrastructure on, under, above or close to the road. | 1..1 | InfrastructureDamageTypeEnum |
| 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 45— Attributes of the "Obstruction" package

A.6.20 "OpenLRExtension" package

A.6.20.1 "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 |

| Class name | Designation | Definition | Stereotype | Abstract |
|----------------------------------|-------------------------------------|--|------------|----------|
| OpenlrLocationReferencePoint | Openlr location reference point | The basis of a location reference is a sequence of location reference points (LRPs). | | no |
| 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 46— Classes of the "OpenLRExtension" package

A.6.20.2 "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 47— Associations of the "OpenLRExtension" package

A.6.20.3 "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 |
| OpenlrLineAttributes | openlrBearing | Openlr bearing | defines the bearing field as an integer value between 0 and 360 whereby "0" is included and "360" is excluded from that range. | 1..1 | AngleInDegrees |
| | openlrFormOfWay | Openlr form of way | The form of way (FOW) can hold eight different values as described in the logical format. | 1..1 | OpenlrFormOfWayEnum |
| | openlrFunctionalRoadClass | Openlr functional road class | The functional road class (FRC) can hold eight different values as described in the logical format. | 1..1 | OpenlrFunctionalRoadClassEnum |
| OpenlrOffsets | openlrNegativeOffset | Openlr negative offset | The negative offset along the line of the location. | 0..1 | MetresAsNonNegativeInteger |
| | openlrPositiveOffset | Openlr positive offset | The positive offset along the line of the location. | 0..1 | MetresAsNonNegativeInteger |
| OpenlrPathAttributes | openlrDistanceToNextLRPoint | Openlr distance to next l r point | The DNP attribute measures the distance in meters between two consecutive LR-points along the location reference path as described in the logical format. | 1..1 | NonNegativeInteger |

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------|------------------------------|---------------------------------------|---|--------------|-------------------------------|
| | openlrLowestFRCToNextLRPoint | Openlr lowest f r c to next l r point | The lowest FRC to the next point indicates the lowest functional road class used in the location reference path to the next LR-point. | 1..1 | OpenlrFunctionalRoadClassEnum |

Table 48— Attributes of the "OpenLRExtension" package

A.6.21 "OperatorAction" package

A.6.21.1 "OperatorAction" package classes

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

Table 49— Classes of the "OperatorAction" package

A.6.21.2 "OperatorAction" package association roles

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

A.6.21.3 "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 50— Attributes of the "OperatorAction" package

A.6.22 "PayloadPublication" package

A.6.22.1 "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 51— Classes of the "PayloadPublication" package

A.6.22.2 "PayloadPublication" package association roles

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

Table 52— Associations of the "PayloadPublication" package

A.6.22.3 "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 53— Attributes of the "PayloadPublication" package

A.6.23 "PayloadPublicationExtensions" package

A.6.23.1 "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 54— Classes of the "PayloadPublicationExtensions" package

A.6.23.2 "PayloadPublicationExtensions" package association roles

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

A.6.23.3 "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 55— Attributes of the "PayloadPublicationExtensions" package

A.6.24 "Point" package

A.6.24.1 "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 56— Classes of the "Point" package

A.6.24.2 "Point" package association roles

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

A.6.24.3 "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 57— Attributes of the "Point" package

A.6.25 "PointAlongLinearElement" package

A.6.25.1 "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 |
| 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 58— Classes of the "PointAlongLinearElement" package

A.6.25.2 "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 |

Table 59— Associations of the "PointAlongLinearElement" package

A.6.25.3 "PointAlongLinearElement" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|--------------------------------------|------------------------------------|--|--|--------------|--------------------------------|
| DistanceFromLinearElementReferent | 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 |

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------|---------------------|-----------------------|--|--------------|--------------------|
| | 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 |
| 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 60— Attributes of the "PointAlongLinearElement" package

A.6.26 "ReusableClasses" package

A.6.26.1 "ReusableClasses" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|-------------------------|----------------------------|---|------------|----------|
| GroupOfVehiclesInvolved | Group of vehicles involved | Group of the vehicles involved having common characteristics and/or status. | | no |
| 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 61— Classes of the "ReusableClasses" package

A.6.26.2 "ReusableClasses" package association roles

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

A.6.26.3 "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 |

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------|--------------------|----------------------|---|--------------|--------------------|
| | sourceName | Source name | The name of the organisation which has produced the information relating to this version of the information. | 0..1 | MultilingualString |
| | 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 62— Attributes of the "ReusableClasses" package

A.6.27 "Roadworks" package

A.6.27.1 "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 63— Classes of the "Roadworks" package

A.6.27.2 "Roadworks" package association roles

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

A.6.27.3 "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 64— Attributes of the "Roadworks" package

A.6.28 "SafetyRelatedMessages" package

A.6.28.1 "SafetyRelatedMessages" package classes

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

Table 65— Classes of the "SafetyRelatedMessages" package

A.6.28.2 "SafetyRelatedMessages" package association roles

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

A.6.28.3 "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 66— Attributes of the "SafetyRelatedMessages" package

A.6.29 "SituationPublication" package

A.6.29.1 "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 67— Classes of the "SituationPublication" package

A.6.29.2 "SituationPublication" package association roles

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

A.6.29.3 "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 68— Attributes of the "SituationPublication" package

A.6.30 "SituationRecord" package

A.6.30.1 "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 69— Classes of the "SituationRecord" package

A.6.30.2 "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 70— Associations of the "SituationRecord" package

A.6.30.3 "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 |

| 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 71— Attributes of the "SituationRecord" package

A.6.31 "SituationRecordExtensions" package

A.6.31.1 "SituationRecordExtensions" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|-------------------------------------|---|--|------------|----------|
| AdditionalInformationRelatedToEvent | Additional information related to event | A extension to provide additional details of an event that are not covered by core Datex2 elements | | no |
| AffectedModesOfTransport | Affected modes of transport | Affected modes of transport or types of vehicles by the specified event | | no |
| EventTypeInfo | Event type info | Detail of the event type | | no |
| SituationRecordExtended | Situation record extended | Situation record extensions relevant to AustriaProfile | | no |
| SupplementaryAlertCEventCode | Supplementary ALERT-Cevent code | List of supplementary event codes | | no |

Table 72— Classes of the "SituationRecordExtensions" package

A.6.31.2 "SituationRecordExtensions" package association roles

| Class name | Role name | Designation | Definition | Multiplicity | Target |
|---------------|-------------------------------|----------------------------------|------------|--------------|------------------------------|
| EventTypeInfo | supplementaryAlertCEventCodes | Supplementary ALERT-Cevent codes | | 0..* | SupplementaryAlertCEventCode |

Table 73— Associations of the "SituationRecordExtensions" package

A.6.31.3 "SituationRecordExtensions" package attributes

| Class name | Attribute name | Designation | Definition | Multiplicity | Type |
|------------------------------|-----------------|--------------------|--|--------------|-------------------------|
| AffectedModesOfTransport | affectedMode | Affected mode | Affected mode of transportation by the event | 1..* | ExtendedVehicleTypeEnum |
| EventTypeInfo | alertCEventCode | ALERT-C event code | One or more alertC event codes corresponding to the event type | 1..1 | Integer |
| | eventType | Event type | Event type | 0..1 | String |
| SupplementaryAlertCEventCode | alertCEventCode | ALERT-C event code | | 1..1 | Integer |

Table 74— Attributes of the "SituationRecordExtensions" package

A.6.32 "TimePeriodOfDay" package

A.6.32.1 "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 75— Classes of the "TimePeriodOfDay" package

A.6.32.2 "TimePeriodOfDay" package association roles

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

A.6.32.3 "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 76— Attributes of the "TimePeriodOfDay" package

A.6.33 "TrafficElement" package

A.6.33.1 "TrafficElement" package classes

| Class name | Designation | Definition | Stereotype | Abstract |
|------------------------|---------------------------|--|------------|----------|
| AbnormalTraffic | Abnormal traffic | A traffic condition which is not normal. | | no |
| EquipmentOrSystemFault | Equipment or system fault | Equipment or system which is faulty, malfunctioning or not in a fully operational state that may be of interest or concern to road operators and road users. | | 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 77— Classes of the "TrafficElement" package

A.6.33.2 "TrafficElement" package association roles

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

A.6.33.3 "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 |
| | numberOfVehiclesWaiting | Number of vehicles waiting | The number of vehicles waiting in a queue. | 0..1 | NonNegativeInteger |
| | queueLength | Queue length | The length of a queue or the average length of queues in separate lanes due to a situation. | 0..1 | MetresAsNonNegativeInteger |
| | relativeTrafficFlow | Relative traffic flow | Assessment of the traffic flow conditions relative to normally expected conditions at this date/time. | 0..1 | RelativeTrafficFlowEnum |
| | trafficFlowCharacteristics | Traffic flow characteristics | A characterization of the traffic flow. | 0..1 | TrafficFlowCharacteristicsEnum |
| | trafficTrendType | Traffic trend type | A characterization of the trend in the traffic conditions at the specified location and direction. | 0..1 | TrafficTrendTypeEnum |
| EquipmentOrSystemFault | equipmentOrSystemFaultType | Equipment or system fault type | Failure, malfunction or non operational condition of equipment or system. | 1..1 | EquipmentOrSystemFaultTypeEnum |
| | faultyEquipmentOrSystemType | Faulty equipment or system type | The type of equipment or system which is faulty, malfunctioning or not in a fully operational state. | 1..1 | EquipmentOrSystemTypeEnum |

Table 78— Attributes of the "TrafficElement" package

A.6.34 "Validity" package

A.6.34.1 "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 79— Classes of the "Validity" package

A.6.34.2 "Validity" package association roles

| Class name | Role name | Designation | Definition | Multiplicity | Target |
|---------------|-----------------------------|---------------------------------|--|--------------|-----------------|
| OverallPeriod | exceptionPeriod | Exception period | A single time period, a recurring time period or a set of different recurring time periods during which validity is false. | 0..* | Period |
| | validPeriod | Valid period | A single time period, a recurring time period or a set of different recurring time periods during which validity is true. | 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 80— Associations of the "Validity" package

A.6.34.3 "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 81— Attributes of the "Validity" package

A.6.35 "VehicleCharacteristics" package

A.6.35.1 "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 82— Classes of the "VehicleCharacteristics" package

A.6.35.2 "VehicleCharacteristics" package association roles

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

A.6.35.3 "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 83— Attributes of the "VehicleCharacteristics" package

A.7 Data Dictionary of <<datatypes>> for "AustrianUnplannedEventsProfile"

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

A.7.1 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.7.2 The <<datatype>> "AngleInDegrees"

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

A.7.3 The <<datatype>> "KilometresPerHour"

A measure of speed defined in kilometres per hour.

A.7.4 The <<datatype>> "MetresAsFloat"

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

A.7.5 The <<datatype>> "MetresAsNonNegativeInteger"

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

A.7.6 The <<datatype>> "Percentage"

A measure of percentage.

A.7.7 The <<datatype>> "Seconds"

Seconds.

A.7.8 The <<datatype>> "Tonnes"

A measure of weight defined in metric tonnes.

A.7.9 The <<datatype>> "VehiclesPerHour"

Vehicles per hour.

A.8 Data Dictionary of <<enumerations>> for "AustrianUnplannedEventsProfile"

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

A.8.1 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 84— Values contained in the enumeration "AbnormalTrafficTypeEnum"

A.8.2 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 85— Values contained in the enumeration "AccidentCauseEnum"

A.8.3 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. |

| Enumerated value name | Designation | Definition |
|----------------------------|-------------------------------|--|
| collisionWithPerson | Collision with person | Collision of vehicle with one or more pedestrians. |
| 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|---------------------|---|
| rearCollision | Rear collision | Includes all accidents where one or more vehicles have collided with the rear of one or more other vehicles. |
| 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 86— Values contained in the enumeration "AccidentTypeEnum"

A.8.4 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 87— Values contained in the enumeration "AlertCDirectionEnum"

A.8.5 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 88— Values contained in the enumeration "AnimalPresenceTypeEnum"

A.8.6 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 89— Values contained in the enumeration "AreaOfInterestEnum"

A.8.7 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. |

| Enumerated value name | Designation | Definition |
|-----------------------------|--------------------------------|--|
| transportOfVip | Transport of VIP | An operation to transport one or more VIPs. |
| undefinedAuthorityActivity | Undefined authority activity | An authority activity of undefined type. |
| 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 90— Values contained in the enumeration "AuthorityOperationTypeEnum"

A.8.8 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 89— Values contained in the enumeration "CarParkStatusEnum"

A.8.9 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 90— Values contained in the enumeration "CarriagewayEnum"

A.8.10 The <<enumeration>> "CauseTypeEnum"

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

| Enumerated value name | Designation | Definition |
|------------------------|---------------------------|--|
| 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|--------------------|--|
| technicalProblems | Technical problems | Technical problems. |
| terrorism | Terrorism | A terrorist incident. |
| toxicCloudAlert | Toxic cloud alert | An alert relating to the release of toxic gases and/or particulates. |
| vandalism | Vandalism | A vandalism incident. |

Table 911— Values contained in the enumeration "CauseTypeEnum"

A.8.11 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 92— Values contained in the enumeration "CommentTypeEnum"

A.8.12 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 93— Values contained in the enumeration "ComparisonOperatorEnum"

A.8.13 The <<enumeration>> "ComplianceOptionEnum"

Types of compliance.

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

Table 94— Values contained in the enumeration "ComplianceOptionEnum"

A.8.14 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 95— Values contained in the enumeration "ConfidentialityValueEnum"

A.8.15 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 |

| Enumerated value name | Designation | Definition |
|-----------------------|-------------|--|
| li | li | Lichtenstein |
| lt | lt | Lithuania |
| 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 96— Values contained in the enumeration "CountryEnum"

A.8.16 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 97— Values contained in the enumeration "DayEnum"

A.8.17 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 98— Values contained in the enumeration "DelaysTypeEnum"

A.8.18 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 99— Values contained in the enumeration "DirectionEnum"

A.8.19 The <<enumeration>> "DisturbanceActivityTypeEnum"

Types of disturbance activities.

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

| Enumerated value name | Designation | Definition |
|-----------------------------|-------------------------------|---|
| 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. |
| 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|-------------------|---|
| unspecifiedAlert | Unspecified alert | An alert to a perceived or actual threat of an unspecified nature, which could disrupt traffic. |

Table 100— Values contained in the enumeration "DisturbanceActivityTypeEnum"

A.8.20 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 101— Values contained in the enumeration "DrivingConditionTypeEnum"

A.8.21 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|----------------|--|
| smokeOrFumes | Smoke or fumes | Smoke or fumes which may hinder driving conditions or distract drivers. |
| 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.8.22 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.8.23 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.8.24 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. |

| Enumerated value name | Designation | Definition |
|------------------------------------|--|---|
| 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. |
| 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 105— Values contained in the enumeration "ExtendedVehicleTypeEnum"

A.8.25 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. |

| Enumerated value name | Designation | Definition |
|--------------------------------------|---|--|
| observeAmberAlert | Observe amber alert | Observe current amber alert (an emergency alert issued for a missing or abducted child). |
| 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 106— Values contained in the enumeration "GeneralInstructionToRoadUsersTypeEnum"

A.8.26 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 107— Values contained in the enumeration "GeneralNetworkManagementTypeEnum"

A.8.27 The <<enumeration>> "GipReferenceDirectionEnum"

Enumeration for GipLink reference direction

| Enumerated value name | Designation | Definition |
|-----------------------|-------------|------------|
| fromTo | From to | |
| toFrom | To from | |

Table 108— Values contained in the enumeration "GipReferenceDirectionEnum"

A.8.28 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 109— Values contained in the enumeration "HeightGradeEnum"

A.8.29 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 109— Values contained in the enumeration "InformationStatusEnum"

A.8.30 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|-------------|--|
| 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.8.31 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. |
| crawlerLane | Crawler lane | In the crawler lane. |
| emergencyLane | Emergency lane | In the emergency lane. |
| escapeLane | Escape lane | In the escape lane. |
| expressLane | Express lane | In the express lane. |
| hardShoulder | Hard shoulder | On the hard shoulder. |
| heavyVehicleLane | Heavy vehicle lane | In the heavy vehicle lane. |
| lane1 | Lane1 | In the first lane numbered from nearest the hard shoulder to central median. |
| lane2 | Lane2 | In the second lane numbered from nearest the hard shoulder to central median. |
| lane3 | Lane3 | In the third lane numbered from nearest the hard shoulder to central median. |
| lane4 | Lane4 | In the fourth lane numbered from nearest the hard shoulder to central median. |
| lane5 | Lane5 | In the fifth lane numbered from nearest the hard shoulder to central median. |
| lane6 | Lane6 | In the sixth lane numbered from nearest the hard shoulder to central median. |
| lane7 | Lane7 | In the seventh lane numbered from nearest the hard shoulder to central median. |
| lane8 | Lane8 | In the eighth lane numbered from nearest the hard shoulder to central median. |

| Enumerated value name | Designation | Definition |
|-----------------------|-------------------------|--|
| lane9 | Lane9 | In the ninth lane numbered from nearest the hard shoulder to central median. |
| layBy | Lay by | In a lay-by. |
| 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 111— Values contained in the enumeration "LaneEnum"

A.8.32 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 112— Values contained in the enumeration "LinearElementNatureEnum"

A.8.33 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 113— Values contained in the enumeration "LinearReferencingDirectionEnum"

A.8.34 The <<enumeration>> "LocationDescriptorEnum"

List of descriptors to help to identify a specific location.

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

| Enumerated value name | Designation | Definition |
|-----------------------|------------------------|---|
| onTheRoadway | On the roadway | On the roadway. |
| onUndergroundSection | On underground section | On underground section of road. |
| 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 114— Values contained in the enumeration "LocationDescriptorEnum"

A.8.35 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 115— Values contained in the enumeration "MobilityEnum"

A.8.36 The <<enumeration>> "MonthOfYearEnum"

A list of the months of the year.

| Enumerated value name | Designation | Definition |
|-----------------------|-------------|-------------------------|
| april | April | The month of April. |
| august | August | The month of August. |
| december | December | The month of December. |
| february | February | The month of February. |
| january | January | The month of January. |
| july | July | The month of July. |
| june | June | The month of June. |
| march | March | The month of March. |
| may | May | The month of May. |
| november | November | The month of November. |
| october | October | The month of October. |
| september | September | The month of September. |

Table 116— Values contained in the enumeration "MonthOfYearEnum"

A.8.37 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.8.38 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. |

| Enumerated value name | Designation | Definition |
|------------------------------------|--|---|
| objectsFallingFromMovingVehicle | Objects falling from moving vehicle | Objects falling from moving vehicles which are presenting a hazard to other vehicles. |
| 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 118— Values contained in the enumeration "ObstructionTypeEnum"

A.8.39 The <<enumeration>> "OpenlrFormOfWayEnum"

Enumeration of for of way

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

Table 119— Values contained in the enumeration "OpenlrFormOfWayEnum"

A.8.40 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 120— Values contained in the enumeration "OpenlrFunctionalRoadClassEnum"

A.8.41 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 121— Values contained in the enumeration "OpenlrOrientationEnum"

A.8.42 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 122— Values contained in the enumeration "OpenlrSideOfRoadEnum"

A.8.43 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 123— Values contained in the enumeration "OperatorActionOriginEnum"

A.8.44 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 124— Values contained in the enumeration "OperatorActionStatusEnum"

A.8.45 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 125— Values contained in the enumeration "PersonCategoryEnum"

A.8.46 The <<enumeration>> "PlacesEnum"

List of types of places.

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

| Enumerated value name | Designation | Definition |
|-----------------------------|--------------------------------|--|
| onLeavingTheCountry | On leaving the country | On leaving the country. |
| onMotorways | On motorways | On motorways. |
| onNonMotorways | On non motorways | On non motorways. |
| 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 126— Values contained in the enumeration "PlacesEnum"

A.8.47 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. |

| Enumerated value name | Designation | Definition |
|------------------------|---------------------------|--|
| lowSunGlare | Low sun glare | Difficult visibility conditions created by low elevation sunlight. |
| 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|---------------------------|---|
| 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. |
| 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.8.48 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 128— Values contained in the enumeration "ProbabilityOfOccurrenceEnum"

A.8.49 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 129— Values contained in the enumeration "ReferentTypeEnum"

A.8.50 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.8.51 The <<enumeration>> "ReroutingManagementTypeEnum"

Management actions relating to rerouting.

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

Table 131— Values contained in the enumeration "ReroutingManagementTypeEnum"

A.8.52 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. |

| Enumerated value name | Designation | Definition |
|------------------------------|----------------------------------|---|
| treeAndVegetationCuttingWork | Tree and vegetation cutting work | Tree and vegetation cutting work adjacent to the roadway. |

Table 132— Values contained in the enumeration "RoadMaintenanceTypeEnum"

A.8.53 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. |

| Enumerated value name | Designation | Definition |
|--|--|--|
| 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. |
| 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). |

| Enumerated value name | Designation | Definition |
|------------------------------|---------------------------------|---|
| 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 133— Values contained in the enumeration "RoadOrCarriagewayOrLaneManagementTypeEnum"

A.8.54 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 134— Values contained in the enumeration "SeverityEnum"

A.8.55 The <<enumeration>> "SourceTypeEnum"

Type of sources from which situation information may be derived.

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

| Enumerated value name | Designation | Definition |
|----------------------------------|-------------------------------------|--|
| trafficMonitoringStation | Traffic monitoring station | A station, usually automatic, dedicated to the monitoring of the road network. |
| 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 135— Values contained in the enumeration "SourceTypeEnum"

A.8.56 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 136— Values contained in the enumeration "SpeedManagementTypeEnum"

A.8.57 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|-------------|--|
| waterMain | Water main | Water main under or along the highway. |

Table 137— Values contained in the enumeration "SubjectTypeOfWorksEnum"

A.8.58 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 138— Values contained in the enumeration "TrafficConstrictionTypeEnum"

A.8.59 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.8.60 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.8.61 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 141— Values contained in the enumeration "TrafficTypeEnum"

A.8.62 The <<enumeration>> "TransitServiceInformationEnum"

Types of public transport information.

| Enumerated value name | Designation | Definition |
|----------------------------------|--------------------------------------|---|
| 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. |

| Enumerated value name | Designation | Definition |
|---|--|--|
| serviceFullyBooked | Service fully booked | The departure of the specified service is fully booked. |
| 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.8.63 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.8.64 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 144— Values contained in the enumeration "UrgencyEnum"

A.8.65 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 145— Values contained in the enumeration "UrlLinkTypeEnum"

A.8.66 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 146— Values contained in the enumeration "ValidityStatusEnum"

A.8.67 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. |

| Enumerated value name | Designation | Definition |
|-----------------------------------|--------------------------------------|---|
| saltingOrGrittingVehicleInUse | Salting or gritting vehicle in use | Salting and gritting vehicles are in use which may cause traffic disruption. |
| 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 147— Values contained in the enumeration "VehicleObstructionTypeEnum"

A.8.68 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. |

| Enumerated value name | Designation | Definition |
|------------------------------------|--|---|
| threeWheeledVehicle | Three wheeled vehicle | Three wheeled vehicle of unspecified type. |
| trailer | Trailer | Trailer. |
| 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 148— Values contained in the enumeration "VehicleTypeEnum"

A.8.69 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. |

| Enumerated value name | Designation | Definition |
|-----------------------|------------------|--|
| slushStrings | Slush strings | Melting snow (slush) on the roadway is formed into wheel tracks. |
| 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.8.70 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 150— Values contained in the enumeration "WeekOfMonthEnum"

A.8.71 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 151— Values contained in the enumeration "WinterEquipmentManagementTypeEnum"