Realis ITS

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# DatexII 3.3 profile realiscounters-3.0

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# DATEXII_3_CommonExtension

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## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/commonExtension** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| com | http://datex2.eu/schema/3/common |
| comx | **http://datex2.eu/schema/3/commonExtension** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.3" targetNamespace="http://datex2.eu/schema/3/commonExtension">
   <xs:import namespace="http://datex2.eu/schema/3/common"
   schemaLocation="DATEXII_3_Common.xsd"/>
   ...
</xs:schema>
```

top

## Global Definitions

### Complex Type: DayWeekMonthExtended

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | DayWeekMonthExtended |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | Extension of class DayWeekMonth. |

**XML Instance Representation**

```
<...>
   <comx:applicableDaysWithinMonth> comx:_ApplicableDaysWithinMonthEnum
   </comx:applicableDaysWithinMonth> [1] ?
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DayWeekMonthExtended">
   <xs:sequence>
      <xs:element name="applicableDaysWithinMonth"
      type="comx:_ApplicableDaysWithinMonthEnum" minOccurs="1" maxOccurs="1"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: FuzzyPeriod

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | FuzzyPeriod |
| **Abstract** | no |
| **Documentation** | Class for fuzzy periods of a day. |

**XML Instance Representation**

```
<...>
   <comx:beginOrDuration> comx:_FuzzyTimeEnum </comx:beginOrDuration> [0..1] ?
   <comx:endOrDuration> comx:_FuzzyTimeEnum </comx:endOrDuration> [0..1] ?
   <comx:_fuzzyPeriodExtension> com:_ExtensionType </comx:_fuzzyPeriodExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="FuzzyPeriod">
   <xs:sequence>
      <xs:element name="beginOrDuration" type="comx:_FuzzyTimeEnum"
      minOccurs="0" maxOccurs="1"/>
      <xs:element name="endOrDuration" type="comx:_FuzzyTimeEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="_fuzzyPeriodExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PeriodExtended

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PeriodExtended |
| **Abstract** | no |
| **Documentation** | Extension class for Period. |

**XML Instance Representation**

```
<...>
   <comx:fuzzyPeriod> comx:FuzzyPeriod </comx:fuzzyPeriod> [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PeriodExtended">
   <xs:sequence>
      <xs:element name="fuzzyPeriod" type="comx:FuzzyPeriod" minOccurs="0"
      maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _ApplicableDaysWithinMonthEnum

| | |
|---|---|
| *Super-types:* | xs:string < ApplicableDaysWithinMonthEnum (by restriction) < **_ApplicableDaysWithinMonthEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _ApplicableDaysWithinMonthEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   comx:ApplicableDaysWithinMonthEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_ApplicableDaysWithinMonthEnum">
   <xs:simpleContent>
      <xs:extension base="comx:ApplicableDaysWithinMonthEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _FuzzyTimeEnum

| | |
|---|---|
| *Super-types:* | xs:string < FuzzyTimeEnum (by restriction) < **_FuzzyTimeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _FuzzyTimeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   comx:FuzzyTimeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_FuzzyTimeEnum">
   <xs:simpleContent>
```

```
      <xs:extension base="comx:FuzzyTimeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Simple Type: ApplicableDaysWithinMonthEnum

*Super-types:* xs:string < **ApplicableDaysWithinMonthEnum** (by restriction)

*Sub-types:*
- _ApplicableDaysWithinMonthEnum (by extension)

**Name** ApplicableDaysWithinMonthEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'evenDay'|'oddDay'|'daysFromOneToFifteen'|'daysFromSixteenToThirtyOne'|'_extended'}

**Documentation** Types of days within a month.

**Schema Component Representation**

```
<xs:simpleType name="ApplicableDaysWithinMonthEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="evenDay"/>
      <xs:enumeration value="oddDay"/>
      <xs:enumeration value="daysFromOneToFifteen"/>
      <xs:enumeration value="daysFromSixteenToThirtyOne"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: FuzzyTimeEnum

*Super-types:* xs:string < **FuzzyTimeEnum** (by restriction)

*Sub-types:*
- _FuzzyTimeEnum (by extension)

**Name** FuzzyTimeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'dawn'|'sunset'|'_extended'}

**Documentation** Enumeration for fuzzy time periods.

**Schema Component Representation**

```
<xs:simpleType name="FuzzyTimeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="dawn"/>
      <xs:enumeration value="sunset"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

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  - Complex Type: **_DayEnum**
  - Complex Type: **_DayWeekMonthExtensionType**
  - Complex Type: **_ExtensionType**
  - Complex Type: **_InformationDeliveryServicesEnum**
  - Complex Type: **_InformationStatusEnum**
  - Complex Type: **_InstanceOfDayEnum**
  - Complex Type: **_MonthOfYearEnum**
  - Complex Type: **_PeriodExtensionType**
  - Complex Type: **_PublicEventTypeEnum**
  - Complex Type: **_SourceTypeEnum**
  - Complex Type: **_SpecialDayTypeEnum**
  - Complex Type: **_TimePrecisionEnum**
  - Complex Type: **_VehicleTypeEnum**
  - Simple Type: **AngleInDegrees**
  - Simple Type: **AxlesPerHour**
  - Simple Type: **Boolean**
  - Simple Type: **CalendarWeekWithinMonthEnum**
  - Simple Type: **ConfidentialityValueEnum**
  - Simple Type: **CountryCode**
  - Simple Type: **DateTime**
  - Simple Type: **DayEnum**
  - Simple Type: **Float**
  - Simple Type: **InformationDeliveryServicesEnum**
  - Simple Type: **InformationStatusEnum**
  - Simple Type: **InstanceOfDayEnum**
  - Simple Type: **Integer**
  - Simple Type: **KilometresPerHour**
  - Simple Type: **Language**
  - Simple Type: **LongString**
  - Simple Type: **MetresAsFloat**
  - Simple Type: **MetresAsNonNegativeInteger**
  - Simple Type: **MonthOfYearEnum**
  - Simple Type: **MultilingualStringValueType**
  - Simple Type: **NonNegativeInteger**
  - Simple Type: **Percentage**
  - Simple Type: **PublicEventTypeEnum**
  - Simple Type: **Seconds**
  - Simple Type: **SourceTypeEnum**
  - Simple Type: **SpecialDayTypeEnum**
  - Simple Type: **String**
  - Simple Type: **Time**
  - Simple Type: **TimePrecisionEnum**
  - Simple Type: **Tonnes**
  - Simple Type: **VehicleTypeEnum**
  - Simple Type: **VehiclesPerHour**
  - Simple Type: **_VehicleTypeEnumExtensionType**


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## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/common** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/commonExtension* (at DATEXII_3_CommonExtension.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |

comx http://datex2.eu/schema/3/commonExtension

com http://datex2.eu/schema/3/common

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" version="3.3"
targetNamespace="http://datex2.eu/schema/3/common">
   <xs:import namespace="http://datex2.eu/schema/3/commonExtension" schemaLocation="DATEXII_3_CommonExtension.xsd"/>
   ...
</xs:schema>
```

top

## Global Definitions

### Complex Type: CalendarWeekWithinMonth

| | |
|---|---|
| *Super-types:* | DayWeekMonth < **CalendarWeekWithinMonth** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | CalendarWeekWithinMonth |
| **Abstract** | no |
| **Documentation** | Specification of periods defined by relevant calendar weeks in a month, see ISO8601. Note: Calendar weeks start with Monday. First week is the week containing the first of the month. |

**XML Instance Representation**

```
<...>
   <com:applicableDay> com:_DayEnum </com:applicableDay> [0..7] ?
   <com:applicableMonth> com:_MonthOfYearEnum </com:applicableMonth> [0..12] ?
   <com:_dayWeekMonthExtension> com:_DayWeekMonthExtensionType </com:_dayWeekMonthExtension> [0..1]
   <com:applicableCalenderWeekWithinMonth> com:_CalendarWeekWithinMonthEnum </com:applicableCalenderWeekWithinMonth>
   [1..6] ?
   <com:_calendarWeekWithinMonthExtension> com:_ExtensionType </com:_calendarWeekWithinMonthExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="CalendarWeekWithinMonth">
   <xs:complexContent>
      <xs:extension base="com:DayWeekMonth">
         <xs:sequence>
            <xs:element name="applicableCalenderWeekWithinMonth" type="com:_CalendarWeekWithinMonthEnum" minOccurs="1"
            maxOccurs="6"/>
            <xs:element name="_calendarWeekWithinMonthExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

### Complex Type: DataValue

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • FloatingPointMetreDistanceValue (by extension)<br>• PercentageValue (by extension)<br>• SpeedValue (by extension)<br>• VehicleFlowValue (by extension) |

| | |
|---|---|
| **Name** | DataValue |
| **Abstract** | yes |
| **Documentation** | A data value of something that can be measured or calculated. Any provided meta-data values specified in the attributes override any specified generic characteristics such as defined for a specific measurement in the MeasurementSiteTable. |

**XML Instance Representation**

```
<...>
   <com:_dataValueExtension> com:_ExtensionType </com:_dataValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DataValue" abstract="true">
   <xs:sequence>
      <xs:element name="_dataValueExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

### Complex Type: DayWeekMonth

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • CalendarWeekWithinMonth (by extension)<br>• InstanceOfDayWithinMonth (by extension) |

| | |
|---|---|
| **Name** | DayWeekMonth |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | Specification of periods defined by the intersection of days or instances of them, calendar weeks and months. |

**XML Instance Representation**

```
<...>
   <com:applicableDay> com:_DayEnum </com:applicableDay> [0..7] ?
   <com:applicableMonth> com:_MonthOfYearEnum </com:applicableMonth> [0..12] ?
   <com:_dayWeekMonthExtension> com:_DayWeekMonthExtensionType </com:_dayWeekMonthExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DayWeekMonth">
   <xs:sequence>
      <xs:element name="applicableDay" type="com:_DayEnum" minOccurs="0" maxOccurs="7"/>
      <xs:element name="applicableMonth" type="com:_MonthOfYearEnum" minOccurs="0" maxOccurs="12"/>
      <xs:element name="_dayWeekMonthExtension" type="com:_DayWeekMonthExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: FloatingPointMetreDistanceValue

| | |
|---|---|
| *Super-types:* | DataValue < **FloatingPointMetreDistanceValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | FloatingPointMetreDistanceValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of distance in metres in a floating point format. |

**XML Instance Representation**

```
<...>
   <com:_dataValueExtension> com:_ExtensionType </com:_dataValueExtension> [0..1]
   <com:distance> com:MetresAsFloat </com:distance> [1] ?
   <com:_floatingPointMetreDistanceValueExtension> com:_ExtensionType
   </com:_floatingPointMetreDistanceValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="FloatingPointMetreDistanceValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="distance" type="com:MetresAsFloat" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_floatingPointMetreDistanceValueExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: HeaderInformation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | HeaderInformation |
| **Abstract** | no |
| **Documentation** | Management information relating to the data contained within a publication. |

**XML Instance Representation**

```
<...>
   <com:confidentiality> com:_ConfidentialityValueEnum </com:confidentiality> [0..1] ?
   <com:allowedDeliveryChannel> com:_InformationDeliveryServicesEnum </com:allowedDeliveryChannel> [0..*] ?
   <com:informationStatus> com:_InformationStatusEnum </com:informationStatus> [1] ?
   <com:_headerInformationExtension> com:_ExtensionType </com:_headerInformationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="HeaderInformation">
   <xs:sequence>
      <xs:element name="confidentiality" type="com:_ConfidentialityValueEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="allowedDeliveryChannel" type="com:_InformationDeliveryServicesEnum" minOccurs="0"
      maxOccurs="unbounded"/>
      <xs:element name="informationStatus" type="com:_InformationStatusEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_headerInformationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: InstanceOfDayWithinMonth

| | |
|---|---|
| *Super-types:* | DayWeekMonth < **InstanceOfDayWithinMonth** (by extension) |

| *Sub-types:* | None |
|---|---|

| **Name** | InstanceOfDayWithinMonth |
|---|---|
| **Abstract** | no |
| **Documentation** | Specification of periods defined by the instance of a specific weekday within a month (e.g. 3rd Tuesday in May) |

**XML Instance Representation**

```
<...>
   <com:applicableDay> com:_DayEnum </com:applicableDay> [0..7] ?
   <com:applicableMonth> com:_MonthOfYearEnum </com:applicableMonth> [0..12] ?
   <com:_dayWeekMonthExtension> com:_DayWeekMonthExtensionType </com:_dayWeekMonthExtension> [0..1]
   <com:applicableInstanceOfDayWithinMonth> com:_InstanceOfDayEnum </com:applicableInstanceOfDayWithinMonth> [1..5] ?
   <com:_instanceOfDayWithinMonthExtension> com:_ExtensionType </com:_instanceOfDayWithinMonthExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="InstanceOfDayWithinMonth">
   <xs:complexContent>
      <xs:extension base="com:DayWeekMonth">
         <xs:sequence>
            <xs:element name="applicableInstanceOfDayWithinMonth" type="com:_InstanceOfDayEnum" minOccurs="1"
            maxOccurs="5"/>
            <xs:element name="_instanceOfDayWithinMonthExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: InternationalIdentifier

| *Super-types:* | None |
|---|---|
| *Sub-types:* | None |

| **Name** | InternationalIdentifier |
|---|---|
| **Abstract** | no |
| **Documentation** | An identifier/name whose range is specific to the particular country. |

**XML Instance Representation**

```
<...>
   <com:country> com:CountryCode </com:country> [1] ?
   <com:nationalIdentifier> com:String </com:nationalIdentifier> [1] ?
   <com:_internationalIdentifierExtension> com:_ExtensionType </com:_internationalIdentifierExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="InternationalIdentifier">
   <xs:sequence>
      <xs:element name="country" type="com:CountryCode" minOccurs="1" maxOccurs="1"/>
      <xs:element name="nationalIdentifier" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_internationalIdentifierExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: MultilingualString

| *Super-types:* | None |
|---|---|
| *Sub-types:* | None |

| **Name** | MultilingualString |
|---|---|
| **Abstract** | no |

**XML Instance Representation**

```
<...>
   <com:values> [1]
      <com:value> com:MultilingualStringValue </com:value> [1..*]
   </com:values>
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MultilingualString">
   <xs:sequence>
      <xs:element name="values">
         <xs:complexType>
            <xs:sequence>
               <xs:element name="value" type="com:MultilingualStringValue" maxOccurs="unbounded"/>
            </xs:sequence>
         </xs:complexType>
      </xs:element>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: MultilingualStringValue

| | |
|---|---|
| *Super-types:* | xs:string < MultilingualStringValueType (by restriction) < **MultilingualStringValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MultilingualStringValue |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 lang="xs:language [0..1]">
   com:MultilingualStringValueType
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MultilingualStringValue">
   <xs:simpleContent>
      <xs:extension base="com:MultilingualStringValueType">
         <xs:attribute name="lang" type="xs:language"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

---

## Complex Type: NamedArea

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | NamedArea |
| **Abstract** | yes |
| **Documentation** | An abstract hook class to hook in a model for a named area. |

**XML Instance Representation**

```
<...>
   <com:_namedAreaExtension> com:_ExtensionType </com:_namedAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="NamedArea" abstract="true">
   <xs:sequence>
      <xs:element name="_namedAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

---

## Complex Type: PayloadPublication

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PayloadPublication |
| **Abstract** | yes |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...
 lang="com:Language [1] ?"
 modelBaseVersion="3 [1]"
 extensionName="xs:string [0..1]"
 extensionVersion="xs:string [0..1]"
 profileName="xs:string [0..1]"
 profileVersion="xs:string [0..1]">
   <com:publicationTime> com:DateTime </com:publicationTime> [1] ?
   <com:publicationCreator> com:InternationalIdentifier </com:publicationCreator> [1]
   <com:_payloadPublicationExtension> com:_ExtensionType </com:_payloadPublicationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PayloadPublication" abstract="true">
   <xs:sequence>
      <xs:element name="publicationTime" type="com:DateTime" minOccurs="1" maxOccurs="1"/>
      <xs:element name="publicationCreator" type="com:InternationalIdentifier"/>
      <xs:element name="_payloadPublicationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
   <xs:attribute name="lang" type="com:Language" use="required"/>
   <xs:attribute name="modelBaseVersion" type="xs:string" use="required" fixed="3"/>
   <xs:attribute name="extensionName" type="xs:string" use="optional"/>
   <xs:attribute name="extensionVersion" type="xs:string" use="optional"/>
   <xs:attribute name="profileName" type="xs:string" use="optional"/>
   <xs:attribute name="profileVersion" type="xs:string" use="optional"/>
</xs:complexType>
```

top

## Complex Type: PercentageValue

| | |
|---|---|
| *Super-types:* | DataValue < **PercentageValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PercentageValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value expressed as a percentage. |

**XML Instance Representation**

```
<...>
   <com:_dataValueExtension> com:_ExtensionType </com:_dataValueExtension> [0..1]
   <com:percentage> com:Percentage </com:percentage> [1] ?
   <com:_percentageValueExtension> com:_ExtensionType </com:_percentageValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PercentageValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="percentage" type="com:Percentage" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_percentageValueExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: Period

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Period |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <com:startOfPeriod> com:DateTime </com:startOfPeriod> [0..1] ?
   <com:endOfPeriod> com:DateTime </com:endOfPeriod> [0..1] ?
   <com:periodName> com:MultilingualString </com:periodName> [0..1] ?
   <com:recurringTimePeriodOfDay> com:TimePeriodOfDay </com:recurringTimePeriodOfDay> [0..*] ?
   <com:recurringDayWeekMonthPeriod> com:DayWeekMonth </com:recurringDayWeekMonthPeriod> [0..*] ?
   <com:recurringSpecialDay> com:SpecialDay </com:recurringSpecialDay> [0..*] ?
   <com:_periodExtension> com:_PeriodExtensionType </com:_periodExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Period">
   <xs:sequence>
      <xs:element name="startOfPeriod" type="com:DateTime" minOccurs="0" maxOccurs="1"/>
      <xs:element name="endOfPeriod" type="com:DateTime" minOccurs="0" maxOccurs="1"/>
      <xs:element name="periodName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="recurringTimePeriodOfDay" type="com:TimePeriodOfDay" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="recurringDayWeekMonthPeriod" type="com:DayWeekMonth" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="recurringSpecialDay" type="com:SpecialDay" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="_periodExtension" type="com:_PeriodExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PublicHoliday

| | |
|---|---|
| *Super-types:* | SpecialDay < **PublicHoliday** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PublicHoliday |
| **Abstract** | no |
| **Documentation** | Specification of a specific public holiday in case specialDayType is set to 'publicHoliday'. |

**XML Instance Representation**

```
<...>
   <com:intersectWithApplicableDays> com:Boolean </com:intersectWithApplicableDays> [1] ?
   <com:specialDayType> com:_SpecialDayTypeEnum </com:specialDayType> [1] ?
   <com:publicEvent> com:_PublicEventTypeEnum </com:publicEvent> [0..1] ?
   <com:namedArea> com:NamedArea </com:namedArea> [0..*]
   <com:_specialDayExtension> com:_ExtensionType </com:_specialDayExtension> [0..1]
   <com:publicHolidayName> com:MultilingualString </com:publicHolidayName> [1] ?
   <com:_publicHolidayExtension> com:_ExtensionType </com:_publicHolidayExtension> [0..1]
```

```
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PublicHoliday">
   <xs:complexContent>
      <xs:extension base="com:SpecialDay">
         <xs:sequence>
            <xs:element name="publicHolidayName" type="com:MultilingualString" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_publicHolidayExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: Reference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Reference |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 id="xs:string [1]"/>
```

**Schema Component Representation**

```
<xs:complexType name="Reference">
   <xs:attribute name="id" type="xs:string" use="required"/>
</xs:complexType>
```

top

## Complex Type: Source

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Source |
| **Abstract** | no |
| **Documentation** | Details of the source from which the information was obtained. |

**XML Instance Representation**

```
<...>
   <com:sourceCountry> com:CountryCode </com:sourceCountry> [0..1] ?
   <com:sourceIdentification> com:String </com:sourceIdentification> [0..1] ?
   <com:sourceName> com:MultilingualString </com:sourceName> [0..1] ?
   <com:sourceType> com:_SourceTypeEnum </com:sourceType> [0..1] ?
   <com:reliable> com:Boolean </com:reliable> [0..1] ?
   <com:_sourceExtension> com:_ExtensionType </com:_sourceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Source">
   <xs:sequence>
      <xs:element name="sourceCountry" type="com:CountryCode" minOccurs="0" maxOccurs="1"/>
      <xs:element name="sourceIdentification" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="sourceName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="sourceType" type="com:_SourceTypeEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="reliable" type="com:Boolean" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_sourceExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SpecialDay

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • PublicHoliday (by extension) |

| | |
|---|---|
| **Name** | SpecialDay |
| **Abstract** | no |
| **Documentation** | Specification of a special type of day, possibly also a public holiday. Can be country or region specific. |

**XML Instance Representation**

```
<...>
   <com:intersectWithApplicableDays> com:Boolean </com:intersectWithApplicableDays> [1] ?
   <com:specialDayType> com:_SpecialDayTypeEnum </com:specialDayType> [1] ?
   <com:publicEvent> com:_PublicEventTypeEnum </com:publicEvent> [0..1] ?
   <com:namedArea> com:NamedArea </com:namedArea> [0..*]
   <com:_specialDayExtension> com:_ExtensionType </com:_specialDayExtension> [0..1]
```

```
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SpecialDay">
  <xs:sequence>
    <xs:element name="intersectWithApplicableDays" type="com:Boolean" minOccurs="1" maxOccurs="1"/>
    <xs:element name="specialDayType" type="com:_SpecialDayTypeEnum" minOccurs="1" maxOccurs="1"/>
    <xs:element name="publicEvent" type="com:_PublicEventTypeEnum" minOccurs="0" maxOccurs="1"/>
    <xs:element name="namedArea" type="com:NamedArea" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="_specialDayExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SpeedValue

| | |
|---|---|
| *Super-types:* | DataValue < **SpeedValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SpeedValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of speed. |

**XML Instance Representation**

```
<...>
  <com:_dataValueExtension> com:_ExtensionType </com:_dataValueExtension> [0..1]
  <com:speed> com:KilometresPerHour </com:speed> [1] ?
  <com:_speedValueExtension> com:_ExtensionType </com:_speedValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SpeedValue">
  <xs:complexContent>
    <xs:extension base="com:DataValue">
      <xs:sequence>
        <xs:element name="speed" type="com:KilometresPerHour" minOccurs="1" maxOccurs="1"/>
        <xs:element name="_speedValueExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TimePeriodOfDay

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TimePeriodOfDay |
| **Abstract** | no |
| **Documentation** | Specification of a continuous period of time within a 24 hour period. |

**XML Instance Representation**

```
<...>
  <com:startTimeOfPeriod> com:Time </com:startTimeOfPeriod> [1] ?
  <com:endTimeOfPeriod> com:Time </com:endTimeOfPeriod> [1] ?
  <com:_timePeriodOfDayExtension> com:_ExtensionType </com:_timePeriodOfDayExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TimePeriodOfDay">
  <xs:sequence>
    <xs:element name="startTimeOfPeriod" type="com:Time" minOccurs="1" maxOccurs="1"/>
    <xs:element name="endTimeOfPeriod" type="com:Time" minOccurs="1" maxOccurs="1"/>
    <xs:element name="_timePeriodOfDayExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: VehicleCharacteristics

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | VehicleCharacteristics |
| **Abstract** | no |
| **Documentation** | The characteristics of a vehicle, e.g. lorry of gross weight greater than 30 tonnes. |

**XML Instance Representation**

```
<...>
  <com:vehicleType> com:_VehicleTypeEnum </com:vehicleType> [0..*] ?
  <com:_vehicleCharacteristicsExtension> com:_ExtensionType </com:_vehicleCharacteristicsExtension> [0..1]
```

```
</...>
```

**Schema Component Representation**

```
<xs:complexType name="VehicleCharacteristics">
   <xs:sequence>
      <xs:element name="vehicleType" type="com:_VehicleTypeEnum" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="_vehicleCharacteristicsExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: VehicleFlowValue

| | |
|---|---|
| *Super-types:* | DataValue < **VehicleFlowValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | VehicleFlowValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of the flow rate of vehicles. |

**XML Instance Representation**

```
<...>
   <com:_dataValueExtension> com:_ExtensionType </com:_dataValueExtension> [0..1]
   <com:vehicleFlowRate> com:VehiclesPerHour </com:vehicleFlowRate> [1] ?
   <com:_vehicleFlowValueExtension> com:_ExtensionType </com:_vehicleFlowValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="VehicleFlowValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="vehicleFlowRate" type="com:VehiclesPerHour" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_vehicleFlowValueExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: VersionedReference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | VersionedReference |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 id="xs:string [1]"
 version="xs:string [0..1]"/>
```

**Schema Component Representation**

```
<xs:complexType name="VersionedReference">
   <xs:attribute name="id" type="xs:string" use="required"/>
   <xs:attribute name="version" type="xs:string" use="optional"/>
</xs:complexType>
```

top

## Complex Type: _CalendarWeekWithinMonthEnum

| | |
|---|---|
| *Super-types:* | xs:string < CalendarWeekWithinMonthEnum (by restriction) < **_CalendarWeekWithinMonthEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _CalendarWeekWithinMonthEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:CalendarWeekWithinMonthEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_CalendarWeekWithinMonthEnum">
   <xs:simpleContent>
      <xs:extension base="com:CalendarWeekWithinMonthEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _ConfidentialityValueEnum

| | |
|---|---|
| *Super-types:* | xs:string < ConfidentialityValueEnum (by restriction) < **_ConfidentialityValueEnum** (by extension) |
| *Sub-types:* | None |

**Name** _ConfidentialityValueEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:ConfidentialityValueEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_ConfidentialityValueEnum">
   <xs:simpleContent>
      <xs:extension base="com:ConfidentialityValueEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _DayEnum

| | |
|---|---|
| *Super-types:* | xs:string < DayEnum (by restriction) < **_DayEnum** (by extension) |
| *Sub-types:* | None |

**Name** _DayEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:DayEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_DayEnum">
   <xs:simpleContent>
      <xs:extension base="com:DayEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _DayWeekMonthExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

**Name** _DayWeekMonthExtensionType

**Abstract** no

**XML Instance Representation**

```
<...>
   <com:dayWeekMonthExtended> comx:DayWeekMonthExtended </com:dayWeekMonthExtended> [0..1]
   Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_DayWeekMonthExtensionType">
   <xs:sequence>
      <xs:element name="dayWeekMonthExtended" type="comx:DayWeekMonthExtended" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _ExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

**Name** _ExtensionType

**Abstract** no

**XML Instance Representation**

```
<...>
   Allow any elements from any namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_ExtensionType">
   <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _InformationDeliveryServicesEnum

| | |
|---|---|
| *Super-types:* | xs:string < InformationDeliveryServicesEnum (by restriction) < **_InformationDeliveryServicesEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _InformationDeliveryServicesEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:InformationDeliveryServicesEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_InformationDeliveryServicesEnum">
   <xs:simpleContent>
      <xs:extension base="com:InformationDeliveryServicesEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _InformationStatusEnum

| | |
|---|---|
| *Super-types:* | xs:string < InformationStatusEnum (by restriction) < **_InformationStatusEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _InformationStatusEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:InformationStatusEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_InformationStatusEnum">
   <xs:simpleContent>
      <xs:extension base="com:InformationStatusEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _InstanceOfDayEnum

| | |
|---|---|
| *Super-types:* | xs:string < InstanceOfDayEnum (by restriction) < **_InstanceOfDayEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _InstanceOfDayEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:InstanceOfDayEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_InstanceOfDayEnum">
   <xs:simpleContent>
      <xs:extension base="com:InstanceOfDayEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
```

```
</xs:complexType>
```

top

## Complex Type: _MonthOfYearEnum

| | |
|---|---|
| *Super-types:* | xs:string < MonthOfYearEnum (by restriction) < **_MonthOfYearEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _MonthOfYearEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:MonthOfYearEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_MonthOfYearEnum">
   <xs:simpleContent>
      <xs:extension base="com:MonthOfYearEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _PeriodExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _PeriodExtensionType |
| **Abstract** | no |

**XML Instance Representation**

```
<...>
   <com:periodExtended> comx:PeriodExtended </com:periodExtended> [0..1]
   Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PeriodExtensionType">
   <xs:sequence>
      <xs:element name="periodExtended" type="comx:PeriodExtended" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _PublicEventTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < PublicEventTypeEnum (by restriction) < **_PublicEventTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _PublicEventTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   com:PublicEventTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PublicEventTypeEnum">
   <xs:simpleContent>
      <xs:extension base="com:PublicEventTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _SourceTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < SourceTypeEnum (by restriction) < **_SourceTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _SourceTypeEnum |

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  com:SourceTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_SourceTypeEnum">
  <xs:simpleContent>
    <xs:extension base="com:SourceTypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _SpecialDayTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < SpecialDayTypeEnum (by restriction) < **_SpecialDayTypeEnum** (by extension) |
| *Sub-types:* | None |

**Name** _SpecialDayTypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  com:SpecialDayTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_SpecialDayTypeEnum">
  <xs:simpleContent>
    <xs:extension base="com:SpecialDayTypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TimePrecisionEnum

| | |
|---|---|
| *Super-types:* | xs:string < TimePrecisionEnum (by restriction) < **_TimePrecisionEnum** (by extension) |
| *Sub-types:* | None |

**Name** _TimePrecisionEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  com:TimePrecisionEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TimePrecisionEnum">
  <xs:simpleContent>
    <xs:extension base="com:TimePrecisionEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _VehicleTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < VehicleTypeEnum (by restriction) < **_VehicleTypeEnum** (by extension) |
| *Sub-types:* | None |

**Name** _VehicleTypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="com:_VehicleTypeEnumExtensionType [0..1]">
  com:VehicleTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_VehicleTypeEnum">
```

```
  <xs:simpleContent>
    <xs:extension base="com:VehicleTypeEnum">
      <xs:attribute name="_extendedValue" type="com:_VehicleTypeEnumExtensionType"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Simple Type: AngleInDegrees

| | |
|---|---|
| *Super-types:* | xs:nonNegativeInteger < NonNegativeInteger (by restriction) < **AngleInDegrees** (by restriction) |
| *Sub-types:* | None |

**Name** AngleInDegrees

**Content**

- Base XSD Type: nonNegativeInteger
- 0 <= *value* <= 359

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

**Schema Component Representation**

```
<xs:simpleType name="AngleInDegrees">
  <xs:restriction base="com:NonNegativeInteger">
    <xs:minInclusive value="0"/>
    <xs:maxInclusive value="359"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: AxlesPerHour

| | |
|---|---|
| *Super-types:* | xs:nonNegativeInteger < NonNegativeInteger (by restriction) < **AxlesPerHour** (by restriction) |
| *Sub-types:* | None |

**Name** AxlesPerHour

**Content**

- Base XSD Type: nonNegativeInteger

**Documentation** Vehicle axles per hour.

**Schema Component Representation**

```
<xs:simpleType name="AxlesPerHour">
  <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top

## Simple Type: Boolean

| | |
|---|---|
| *Super-types:* | xs:boolean < **Boolean** (by restriction) |
| *Sub-types:* | None |

**Name** Boolean

**Content**

- Base XSD Type: boolean

**Documentation** Boolean has the value space required to support the mathematical concept of binary-valued logic: {true, false}.

**Schema Component Representation**

```
<xs:simpleType name="Boolean">
  <xs:restriction base="xs:boolean"/>
</xs:simpleType>
```

top

## Simple Type: CalendarWeekWithinMonthEnum

| | |
|---|---|
| *Super-types:* | xs:string < **CalendarWeekWithinMonthEnum** (by restriction) |
| *Sub-types:* | _CalendarWeekWithinMonthEnum (by extension) |

**Name** CalendarWeekWithinMonthEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'firstWeek'|'secondWeek'|'thirdWeek'|'fourthWeek'|'fifthWeek'|'sixthWeek'|'lastWeek'|'_extended'}

**Documentation** Calendar week within month (see ISO8601).

**Schema Component Representation**

```
<xs:simpleType name="CalendarWeekWithinMonthEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstWeek"/>
```

```
      <xs:enumeration value="secondWeek"/>
      <xs:enumeration value="thirdWeek"/>
      <xs:enumeration value="fourthWeek"/>
      <xs:enumeration value="fifthWeek"/>
      <xs:enumeration value="sixthWeek"/>
      <xs:enumeration value="lastWeek"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: ConfidentialityValueEnum

| | |
|---|---|
| *Super-types:* | xs:string < **ConfidentialityValueEnum** (by restriction) |
| *Sub-types:* | • _ConfidentialityValueEnum (by extension) |

**Name** ConfidentialityValueEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'internalUse'|'noRestriction'|'restrictedToAuthorities'|'restrictedToAuthoritiesAndTrafficOperators'|'_extended'}

**Documentation** Values of confidentiality.

**Schema Component Representation**

```
<xs:simpleType name="ConfidentialityValueEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="internalUse"/>
      <xs:enumeration value="noRestriction"/>
      <xs:enumeration value="restrictedToAuthorities"/>
      <xs:enumeration value="restrictedToAuthoritiesAndTrafficOperators"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: CountryCode

| | |
|---|---|
| *Super-types:* | xs:string < String (by restriction) < **CountryCode** (by restriction) |
| *Sub-types:* | None |

**Name** CountryCode

**Content**

- Base XSD Type: string
- *length* <= 1024
- *length* <= 2

**Documentation** EN ISO 3166-1 alpha-2 two-letter country code

**Schema Component Representation**

```
<xs:simpleType name="CountryCode">
   <xs:restriction base="com:String">
      <xs:maxLength value="2"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: DateTime

| | |
|---|---|
| *Super-types:* | xs:dateTime < **DateTime** (by restriction) |
| *Sub-types:* | None |

**Name** DateTime

**Content**

- Base XSD Type: dateTime

**Documentation** A combination of integer-valued year, month, day, hour, minute properties, a decimal-valued second property and a time zone property from which it is possible to determine the local time, the equivalent UTC time and the time zone offset from UTC.

**Schema Component Representation**

```
<xs:simpleType name="DateTime">
   <xs:restriction base="xs:dateTime"/>
</xs:simpleType>
```

top

### Simple Type: DayEnum

| | |
|---|---|
| *Super-types:* | xs:string < **DayEnum** (by restriction) |
| *Sub-types:* | • _DayEnum (by extension) |

**Name** DayEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'monday'|'tuesday'|'wednesday'|'thursday'|'friday'|'saturday'|'sunday'|'_extended'}

**Documentation** Days of the week.

**Schema Component Representation**

```
<xs:simpleType name="DayEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="monday"/>
      <xs:enumeration value="tuesday"/>
      <xs:enumeration value="wednesday"/>
      <xs:enumeration value="thursday"/>
      <xs:enumeration value="friday"/>
      <xs:enumeration value="saturday"/>
      <xs:enumeration value="sunday"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: Float

*Super-types:* xs:float < **Float** (by restriction)

*Sub-types:*

- KilometresPerHour (by restriction)
- MetresAsFloat (by restriction)
- Percentage (by restriction)
- Seconds (by restriction)
- Tonnes (by restriction)

**Name** Float

**Content**

- Base XSD Type: float

**Documentation** A floating point number whose value space consists of the values m × 2^e, where m is an integer whose absolute value is less than 2^24, and e is an integer between -149 and 104, inclusive.

**Schema Component Representation**

```
<xs:simpleType name="Float">
   <xs:restriction base="xs:float"/>
</xs:simpleType>
```

top

## Simple Type: InformationDeliveryServicesEnum

*Super-types:* xs:string < **InformationDeliveryServicesEnum** (by restriction)

*Sub-types:*

- _InformationDeliveryServicesEnum (by extension)

**Name** InformationDeliveryServicesEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'anyGeneralDeliveryService'|'safetyServices'|'vms'|'_extended'}

**Documentation** List of service channels or devices on which information or data exchanged can be delivered.

**Schema Component Representation**

```
<xs:simpleType name="InformationDeliveryServicesEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="anyGeneralDeliveryService"/>
      <xs:enumeration value="safetyServices"/>
      <xs:enumeration value="vms"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: InformationStatusEnum

*Super-types:* xs:string < **InformationStatusEnum** (by restriction)

*Sub-types:*

- _InformationStatusEnum (by extension)

**Name** InformationStatusEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'real'|'securityExercise'|'technicalExercise'|'test'|'_extended'}

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

**Schema Component Representation**

```
<xs:simpleType name="InformationStatusEnum">
```

```
  <xs:restriction base="xs:string">
    <xs:enumeration value="real"/>
    <xs:enumeration value="securityExercise"/>
    <xs:enumeration value="technicalExercise"/>
    <xs:enumeration value="test"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: InstanceOfDayEnum

| | |
|---|---|
| *Super-types:* | xs:string < **InstanceOfDayEnum** (by restriction) |
| *Sub-types:* | • _InstanceOfDayEnum (by extension) |

**Name** InstanceOfDayEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'firstInstance'|'secondInstance'|'thirdInstance'|'fourthInstance'|'fifthInstance'|'lastInstance'|'_extended'}

**Documentation** Instances of a day of the week in a month

**Schema Component Representation**

```
<xs:simpleType name="InstanceOfDayEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="firstInstance"/>
    <xs:enumeration value="secondInstance"/>
    <xs:enumeration value="thirdInstance"/>
    <xs:enumeration value="fourthInstance"/>
    <xs:enumeration value="fifthInstance"/>
    <xs:enumeration value="lastInstance"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: Integer

| | |
|---|---|
| *Super-types:* | xs:integer < **Integer** (by restriction) |
| *Sub-types:* | None |

**Name** Integer

**Content**

- Base XSD Type: integer

**Documentation** An integer number whose value space is the set {-2147483648, -2147483647, -2147483646, ..., -2, -1, 0, 1, 2, ..., 2147483645, 2147483646, 2147483647}.

**Schema Component Representation**

```
<xs:simpleType name="Integer">
  <xs:restriction base="xs:integer"/>
</xs:simpleType>
```

top

### Simple Type: KilometresPerHour

| | |
|---|---|
| *Super-types:* | xs:float < Float (by restriction) < **KilometresPerHour** (by restriction) |
| *Sub-types:* | None |

**Name** KilometresPerHour

**Content**

- Base XSD Type: float

**Documentation** A measure of speed defined in kilometres per hour.

**Schema Component Representation**

```
<xs:simpleType name="KilometresPerHour">
  <xs:restriction base="com:Float"/>
</xs:simpleType>
```

top

### Simple Type: Language

| | |
|---|---|
| *Super-types:* | xs:language < **Language** (by restriction) |
| *Sub-types:* | None |

**Name** Language

**Content**

- Base XSD Type: language

**Documentation** A language datatype, identifies a specified language by an ISO 639-1 2-alpha code.

**Schema Component Representation**

```
<xs:simpleType name="Language">
  <xs:restriction base="xs:language"/>
</xs:simpleType>
```

top

## Simple Type: LongString

| | |
|---|---|
| *Super-types:* | xs:string < **LongString** (by restriction) |
| *Sub-types:* | None |

**Name** LongString

**Content**

- Base XSD Type: string

**Documentation** A character string with no specified length limit, whose value space is the set of finite-length sequences of characters. Every character has a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.

**Schema Component Representation**

```
<xs:simpleType name="LongString">
  <xs:restriction base="xs:string"/>
</xs:simpleType>
```

top

## Simple Type: MetresAsFloat

| | |
|---|---|
| *Super-types:* | xs:float < Float (by restriction) < **MetresAsFloat** (by restriction) |
| *Sub-types:* | None |

**Name** MetresAsFloat

**Content**

- Base XSD Type: float

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

**Schema Component Representation**

```
<xs:simpleType name="MetresAsFloat">
  <xs:restriction base="com:Float"/>
</xs:simpleType>
```

top

## Simple Type: MetresAsNonNegativeInteger

| | |
|---|---|
| *Super-types:* | xs:nonNegativeInteger < NonNegativeInteger (by restriction) < **MetresAsNonNegativeInteger** (by restriction) |
| *Sub-types:* | None |

**Name** MetresAsNonNegativeInteger

**Content**

- Base XSD Type: nonNegativeInteger

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

**Schema Component Representation**

```
<xs:simpleType name="MetresAsNonNegativeInteger">
  <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top

## Simple Type: MonthOfYearEnum

| | |
|---|---|
| *Super-types:* | xs:string < **MonthOfYearEnum** (by restriction) |
| *Sub-types:* | _MonthOfYearEnum (by extension) |

**Name** MonthOfYearEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'january'|'february'|'march'|'april'|'may'|'june'|'july'|'august'|'september'|'october'|'november'|'december'|'_extended'}

**Documentation** A list of the months of the year.

**Schema Component Representation**

```
<xs:simpleType name="MonthOfYearEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="january"/>
    <xs:enumeration value="february"/>
    <xs:enumeration value="march"/>
    <xs:enumeration value="april"/>
    <xs:enumeration value="may"/>
    <xs:enumeration value="june"/>
```

```
      <xs:enumeration value="july"/>
      <xs:enumeration value="august"/>
      <xs:enumeration value="september"/>
      <xs:enumeration value="october"/>
      <xs:enumeration value="november"/>
      <xs:enumeration value="december"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: MultilingualStringValueType

*Super-types:* xs:string < **MultilingualStringValueType** (by restriction)

*Sub-types:*
- MultilingualStringValue (by extension)

**Name** MultilingualStringValueType

**Content**
- Base XSD Type: string
- *length* <= 1024

**Schema Component Representation**

```
<xs:simpleType name="MultilingualStringValueType">
   <xs:restriction base="xs:string">
      <xs:maxLength value="1024"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: NonNegativeInteger

*Super-types:* xs:nonNegativeInteger < **NonNegativeInteger** (by restriction)

*Sub-types:*
- AngleInDegrees (by restriction)
- AxlesPerHour (by restriction)
- MetresAsNonNegativeInteger (by restriction)
- VehiclesPerHour (by restriction)

**Name** NonNegativeInteger

**Content**
- Base XSD Type: nonNegativeInteger

**Documentation** An integer number whose value space is the set {0, 1, 2, ..., 2147483645, 2147483646, 2147483647}.

**Schema Component Representation**

```
<xs:simpleType name="NonNegativeInteger">
   <xs:restriction base="xs:nonNegativeInteger"/>
</xs:simpleType>
```

top

### Simple Type: Percentage

*Super-types:* xs:float < Float (by restriction) < **Percentage** (by restriction)

*Sub-types:* None

**Name** Percentage

**Content**
- Base XSD Type: float

**Documentation** A measure of percentage.

**Schema Component Representation**

```
<xs:simpleType name="Percentage">
   <xs:restriction base="com:Float"/>
</xs:simpleType>
```

top

### Simple Type: PublicEventTypeEnum

*Super-types:* xs:string < **PublicEventTypeEnum** (by restriction)

*Sub-types:*
- _PublicEventTypeEnum (by extension)

**Name** PublicEventTypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'agriculturalShow'|'airShow'|'artEvent'|'athleticsMeeting'|'commercialEvent'|'culturalEvent'|'ballGame'|'baseballGame'|'basketballGame'|'beerFestival'|

**Documentation** Types of public events.

**Schema Component Representation**

```
<xs:simpleType name="PublicEventTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="agriculturalShow"/>
    <xs:enumeration value="airShow"/>
    <xs:enumeration value="artEvent"/>
    <xs:enumeration value="athleticsMeeting"/>
    <xs:enumeration value="commercialEvent"/>
    <xs:enumeration value="culturalEvent"/>
    <xs:enumeration value="ballGame"/>
    <xs:enumeration value="baseballGame"/>
    <xs:enumeration value="basketballGame"/>
    <xs:enumeration value="beerFestival"/>
    <xs:enumeration value="bicycleRace"/>
    <xs:enumeration value="boatRace"/>
    <xs:enumeration value="boatShow"/>
    <xs:enumeration value="boxingTournament"/>
    <xs:enumeration value="bullFight"/>
    <xs:enumeration value="ceremonialEvent"/>
    <xs:enumeration value="concert"/>
    <xs:enumeration value="cricketMatch"/>
    <xs:enumeration value="exhibition"/>
    <xs:enumeration value="fair"/>
    <xs:enumeration value="festival"/>
    <xs:enumeration value="filmFestival"/>
    <xs:enumeration value="filmTVMaking"/>
    <xs:enumeration value="fireworkDisplay"/>
    <xs:enumeration value="flowerEvent"/>
    <xs:enumeration value="foodFestival"/>
    <xs:enumeration value="footballMatch"/>
    <xs:enumeration value="funfair"/>
    <xs:enumeration value="gardeningOrFlowerShow"/>
    <xs:enumeration value="golfTournament"/>
    <xs:enumeration value="hockeyGame"/>
    <xs:enumeration value="horseRaceMeeting"/>
    <xs:enumeration value="internationalSportsMeeting"/>
    <xs:enumeration value="majorEvent"/>
    <xs:enumeration value="marathon"/>
    <xs:enumeration value="market"/>
    <xs:enumeration value="match"/>
    <xs:enumeration value="motorShow"/>
    <xs:enumeration value="motorSportRaceMeeting"/>
    <xs:enumeration value="openAirConcert"/>
    <xs:enumeration value="parade"/>
    <xs:enumeration value="procession"/>
    <xs:enumeration value="raceMeeting"/>
    <xs:enumeration value="rugbyMatch"/>
    <xs:enumeration value="severalMajorEvents"/>
    <xs:enumeration value="show"/>
    <xs:enumeration value="showJumping"/>
    <xs:enumeration value="soundAndLightShow"/>
    <xs:enumeration value="sportsMeeting"/>
    <xs:enumeration value="stateOccasion"/>
    <xs:enumeration value="streetFestival"/>
    <xs:enumeration value="tennisTournament"/>
    <xs:enumeration value="theatricalEvent"/>
    <xs:enumeration value="tournament"/>
    <xs:enumeration value="tradeFair"/>
    <xs:enumeration value="waterSportsMeeting"/>
    <xs:enumeration value="wineFestival"/>
    <xs:enumeration value="winterSportsMeeting"/>
    <xs:enumeration value="unknown"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: Seconds

| | |
|---|---|
| *Super-types:* | xs:float < Float (by restriction) < **Seconds** (by restriction) |
| *Sub-types:* | None |

**Name** Seconds

**Content**

- Base XSD Type: float

**Documentation** Seconds.

**Schema Component Representation**

```
<xs:simpleType name="Seconds">
  <xs:restriction base="com:Float"/>
</xs:simpleType>
```

top

## Simple Type: SourceTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **SourceTypeEnum** (by restriction) |
| *Sub-types:* | • _SourceTypeEnum (by extension) |

**Name** SourceTypeEnum

**Content**

- Base XSD Type: string

- *value* comes from list: {'automobileClubPatrol'|'cameraObservation'|'freightVehicleOperator'|'inductionLoopMonitoringStation'|'infraredMonitoringStation'|'microwaveMonitori

**Documentation** Type of sources from which situation information may be derived.

**Schema Component Representation**

```
<xs:simpleType name="SourceTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="automobileClubPatrol"/>
    <xs:enumeration value="cameraObservation"/>
    <xs:enumeration value="freightVehicleOperator"/>
    <xs:enumeration value="inductionLoopMonitoringStation"/>
    <xs:enumeration value="infraredMonitoringStation"/>
    <xs:enumeration value="microwaveMonitoringStation"/>
    <xs:enumeration value="mobileTelephoneCaller"/>
    <xs:enumeration value="nonPoliceEmergencyServicePatrol"/>
    <xs:enumeration value="otherInformation"/>
    <xs:enumeration value="otherOfficialVehicle"/>
    <xs:enumeration value="policePatrol"/>
    <xs:enumeration value="privateBreakdownService"/>
    <xs:enumeration value="publicAndPrivateUtilities"/>
    <xs:enumeration value="registeredMotoristObserver"/>
    <xs:enumeration value="roadAuthorities"/>
    <xs:enumeration value="roadOperatorPatrol"/>
    <xs:enumeration value="roadsideTelephoneCaller"/>
    <xs:enumeration value="spotterAircraft"/>
    <xs:enumeration value="trafficMonitoringStation"/>
    <xs:enumeration value="transitOperator"/>
    <xs:enumeration value="vehicleProbeMeasurement"/>
    <xs:enumeration value="videoProcessingMonitoringStation"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: SpecialDayTypeEnum

*Super-types:* xs:string < **SpecialDayTypeEnum** (by restriction)

*Sub-types:*
- _SpecialDayTypeEnum (by extension)

**Name** SpecialDayTypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'dayBeforePublicHoliday'|'publicHoliday'|'dayFollowingPublicHoliday'|'longWeekendDay'|'inLieuOfPublicHoliday'|'schoolDay'|'schoolHolidays'|'publicE

**Documentation** Collection of special types of days.

**Schema Component Representation**

```
<xs:simpleType name="SpecialDayTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="dayBeforePublicHoliday"/>
    <xs:enumeration value="publicHoliday"/>
    <xs:enumeration value="dayFollowingPublicHoliday"/>
    <xs:enumeration value="longWeekendDay"/>
    <xs:enumeration value="inLieuOfPublicHoliday"/>
    <xs:enumeration value="schoolDay"/>
    <xs:enumeration value="schoolHolidays"/>
    <xs:enumeration value="publicEventDay"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: String

*Super-types:* xs:string < **String** (by restriction)

*Sub-types:*
- CountryCode (by restriction)

**Name** String

**Content**
- Base XSD Type: string
- *length* <= 1024

**Documentation** A character string whose value space is the set of finite-length sequences of characters. Every character has a corresponding Universal Character Set code point (as defined in ISO/IEC 10646), which is an integer.

**Schema Component Representation**

```
<xs:simpleType name="String">
  <xs:restriction base="xs:string">
    <xs:maxLength value="1024"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: Time

| | |
|---|---|
| *Super-types:* | xs:time < **Time** (by restriction) |
| *Sub-types:* | None |

**Name** Time

**Content**

- Base XSD Type: time

**Documentation** An instant of time that recurs every day. The value space of time is the space of time of day values as defined in § 5.3 of [ISO 8601]. Specifically, it is a set of zero-duration daily time instances.

**Schema Component Representation**

```
<xs:simpleType name="Time">
   <xs:restriction base="xs:time"/>
</xs:simpleType>
```

top

## Simple Type: TimePrecisionEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TimePrecisionEnum** (by restriction) |
| *Sub-types:* | • _TimePrecisionEnum (by extension) |

**Name** TimePrecisionEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'tenthsOfSecond'|'second'|'minute'|'quarterHour'|'halfHour'|'hour'|'_extended'}

**Documentation** List of precisions to which times can be given.

**Schema Component Representation**

```
<xs:simpleType name="TimePrecisionEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="tenthsOfSecond"/>
      <xs:enumeration value="second"/>
      <xs:enumeration value="minute"/>
      <xs:enumeration value="quarterHour"/>
      <xs:enumeration value="halfHour"/>
      <xs:enumeration value="hour"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: Tonnes

| | |
|---|---|
| *Super-types:* | xs:float < Float (by restriction) < **Tonnes** (by restriction) |
| *Sub-types:* | None |

**Name** Tonnes

**Content**

- Base XSD Type: float

**Documentation** A measure of weight defined in metric tonnes.

**Schema Component Representation**

```
<xs:simpleType name="Tonnes">
   <xs:restriction base="com:Float"/>
</xs:simpleType>
```

top

## Simple Type: VehicleTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **VehicleTypeEnum** (by restriction) |
| *Sub-types:* | • _VehicleTypeEnum (by extension) |

**Name** VehicleTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'anyVehicle'|'lorry'|'passengerCar'|'unknown'|'other'|'_extended'}

**Documentation** Types of vehicle.

**Schema Component Representation**

```
<xs:simpleType name="VehicleTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="anyVehicle"/>
      <xs:enumeration value="lorry"/>
      <xs:enumeration value="passengerCar"/>
      <xs:enumeration value="unknown"/>
      <xs:enumeration value="other"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
```

```
</xs:simpleType>
```

top

## Simple Type: VehiclesPerHour

| | |
|---|---|
| *Super-types:* | xs:nonNegativeInteger < NonNegativeInteger (by restriction) < **VehiclesPerHour** (by restriction) |
| *Sub-types:* | None |

**Name** VehiclesPerHour

**Content**

- Base XSD Type: nonNegativeInteger

**Documentation** Vehicles per hour.

**Schema Component Representation**

```
<xs:simpleType name="VehiclesPerHour">
  <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top

## Simple Type: _VehicleTypeEnumExtensionType

| | |
|---|---|
| *Super-types:* | xs:string < **_VehicleTypeEnumExtensionType** (by restriction) |
| *Sub-types:* | None |

**Name** _VehicleTypeEnumExtensionType

**Content**

- Base XSD Type: string

**Schema Component Representation**

```
<xs:simpleType name="_VehicleTypeEnumExtensionType">
  <xs:restriction base="xs:string"/>
</xs:simpleType>
```

top

# DATEXII_3_D2Payload

## Table of Contents


- Schema Document Properties
- Global Declarations
  - Element: **payload**


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## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/d2Payload** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/locationExtension* (at DATEXII_3_LocationExtension.xsd)<br>  ◦ *http://datex2.eu/schema/3/commonExtension* (at DATEXII_3_CommonExtension.xsd)<br>  ◦ *http://datex2.eu/schema/3/parking* (at DATEXII_3_Parking.xsd)<br>  ◦ *http://datex2.eu/schema/3/roadTrafficData* (at DATEXII_3_RoadTrafficData.xsd)<br>  ◦ *http://datex2.eu/schema/3/facilities* (at DATEXII_3_Facilities.xsd)<br>  ◦ *http://datex2.eu/schema/3/locationReferencing* (at DATEXII_3_LocationReferencing.xsd)<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| locx | http://datex2.eu/schema/3/locationExtension |
| comx | http://datex2.eu/schema/3/commonExtension |
| prk | http://datex2.eu/schema/3/parking |
| roa | http://datex2.eu/schema/3/roadTrafficData |
| fac | http://datex2.eu/schema/3/facilities |
| loc | http://datex2.eu/schema/3/locationReferencing |
| com | http://datex2.eu/schema/3/common |
| d2 | **http://datex2.eu/schema/3/d2Payload** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.3" targetNamespace="http://datex2.eu/schema/3/d2Payload">
   <xs:import namespace="http://datex2.eu/schema/3/locationExtension"
   schemaLocation="DATEXII_3_LocationExtension.xsd"/>
```

```
   <xs:import namespace="http://datex2.eu/schema/3/commonExtension"
   schemaLocation="DATEXII_3_CommonExtension.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/parking"
   schemaLocation="DATEXII_3_Parking.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/roadTrafficData"
   schemaLocation="DATEXII_3_RoadTrafficData.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/facilities"
   schemaLocation="DATEXII_3_Facilities.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/locationReferencing"
   schemaLocation="DATEXII_3_LocationReferencing.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/common"
   schemaLocation="DATEXII_3_Common.xsd"/>
   ...
</xs:schema>
```

top

---

# Global Declarations

## Element: payload

| | |
|---|---|
| **Name** | payload |
| **Type** | com:PayloadPublication |
| **Nillable** | no |
| **Abstract** | no |

**XML Instance Representation**

```
<d2:payload> com:PayloadPublication
   <!--
   Uniqueness Constraint - _payloadMeasurementSiteConstraint
   Selector - .//roa:measurementSite
   Field(s) - @id, @version
   -->
   <!--
   Uniqueness Constraint - _payloadMeasurementSiteTableConstraint
   Selector - .//roa:measurementSiteTable
   Field(s) - @id, @version
   -->
</d2:payload>
```

**Schema Component Representation**

```
<xs:element name="payload" type="com:PayloadPublication">
   <xs:unique name="_payloadMeasurementSiteConstraint">
      <xs:selector xpath=".//roa:measurementSite"/>
      <xs:field xpath="@id"/>
      <xs:field xpath="@version"/>
   </xs:unique>
   <xs:unique name="_payloadMeasurementSiteTableConstraint">
      <xs:selector xpath=".//roa:measurementSiteTable"/>
      <xs:field xpath="@id"/>
      <xs:field xpath="@version"/>
   </xs:unique>
</xs:element>
```

top

---

# DATEXII_3_Facilities

## Table of Contents


- Schema Document Properties
- Global Definitions
  - Simple Type: **TimeZone**


top

## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/facilities** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/locationReferencing* (at DATEXII_3_LocationReferencing.xsd)<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| loc | http://datex2.eu/schema/3/locationReferencing |
| com | http://datex2.eu/schema/3/common |
| fac | **http://datex2.eu/schema/3/facilities** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.3" targetNamespace="http://datex2.eu/schema/3/facilities">
   <xs:import namespace="http://datex2.eu/schema/3/locationReferencing"
   schemaLocation="DATEXII_3_LocationReferencing.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/common"
   schemaLocation="DATEXII_3_Common.xsd"/>
   ...
</xs:schema>
```

top

## Global Definitions

### Simple Type: TimeZone

| | |
|---|---|
| *Super-types:* | com:String < **TimeZone** (by restriction) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TimeZone |
| **Content** | • **'String' super type was not found in this schema. Its facets could not be printed out.**<br>• *pattern* = [-+][0-9][0-9]:[0-9][0-9]|Z |
| **Documentation** | Identifies a time zone by specifying the difference to UTC in hours and minutes, as defined in ISO 8601. |

**Schema Component Representation**

```
<xs:simpleType name="TimeZone">
   <xs:restriction base="com:String">
      <xs:pattern value="[-+][0-9][0-9]:[0-9][0-9]|Z"/>
   </xs:restriction>
</xs:simpleType>
```

top

# DATEXII_3_LocationExtension

## Table of Contents


- Schema Document Properties
- Global Definitions
  - Complex Type: **Address**
  - Complex Type: **AddressLine**
  - Complex Type: **FacilityLocation**
  - Complex Type: **NamedAreaExtended**
  - Complex Type: **SupplementaryPositionalDescriptionExtended**
  - Complex Type: **_AddressLineTypeEnum**
  - Complex Type: **_HouseNumberSideEnum**
  - Simple Type: **AddressLineTypeEnum**
  - Simple Type: **HouseNumberSideEnum**
  - Simple Type: **NamedAreaCode**


top

## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/locationExtension** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd)<br>  ◦ *http://datex2.eu/schema/3/facilities* (at DATEXII_3_Facilities.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| com | http://datex2.eu/schema/3/common |
| fac | http://datex2.eu/schema/3/facilities |
| locx | **http://datex2.eu/schema/3/locationExtension** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" version="3.3"
targetNamespace="http://datex2.eu/schema/3/locationExtension">
   <xs:import namespace="http://datex2.eu/schema/3/common" schemaLocation="DATEXII_3_Common.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/facilities"
   schemaLocation="DATEXII_3_Facilities.xsd"/>
   ...
</xs:schema>
```

top

## Global Definitions

### Complex Type: Address

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Address |
| **Abstract** | no |
| **Documentation** | A street oriented addressing structure supporting delivery |

**XML Instance Representation**

```
<...>
   <locx:postcode> com:String </locx:postcode> [0..1] ?
   <locx:city> com:MultilingualString </locx:city> [0..1] ?
   <locx:countryCode> com:CountryCode </locx:countryCode> [0..1] ?
   <locx:addressLine> locx:AddressLine </locx:addressLine> [0..*]
   <locx:_addressExtension> com:_ExtensionType </locx:_addressExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Address">
  <xs:sequence>
    <xs:element name="postcode" type="com:String" minOccurs="0" maxOccurs="1"/>
    <xs:element name="city" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
    <xs:element name="countryCode" type="com:CountryCode" minOccurs="0" maxOccurs="1"/>
    <xs:element name="addressLine" type="locx:AddressLine" minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="_addressExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AddressLine

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AddressLine |
| **Abstract** | no |
| **Documentation** | A class defining information concerning one line of a postal address. |

**XML Instance Representation**

```
<...
 order="com:NonNegativeInteger [1] ?">
   <locx:type> locx:_AddressLineTypeEnum </locx:type> [1] ?
   <locx:text> com:MultilingualString </locx:text> [1] ?
   <locx:_addressLineExtension> com:_ExtensionType </locx:_addressLineExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AddressLine">
  <xs:sequence>
    <xs:element name="type" type="locx:_AddressLineTypeEnum" minOccurs="1" maxOccurs="1"/>
    <xs:element name="text" type="com:MultilingualString" minOccurs="1" maxOccurs="1"/>
    <xs:element name="_addressLineExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
  <xs:attribute name="order" type="com:NonNegativeInteger" use="required"/>
</xs:complexType>
```

top

## Complex Type: FacilityLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | FacilityLocation |
| **Abstract** | no |
| **Documentation** | A location for which a time zone and an address can be specified |

**XML Instance Representation**

```
<...>
   <locx:timeZone> fac:TimeZone </locx:timeZone> [0..1] ?
   <locx:address> locx:Address </locx:address> [0..1] ?
</...>
```

**Schema Component Representation**

```
<xs:complexType name="FacilityLocation">
  <xs:sequence>
    <xs:element name="timeZone" type="fac:TimeZone" minOccurs="0" maxOccurs="1"/>
    <xs:element name="address" type="locx:Address" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: NamedAreaExtended

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | NamedAreaExtended |
| **Abstract** | no |

**Documentation** A named area with an additional code (that is not an ISO subdivision code)

**XML Instance Representation**

```
<...>
   <locx:namedAreaCode> locx:NamedAreaCode </locx:namedAreaCode> [1] ?
</...>
```

**Schema Component Representation**

```
<xs:complexType name="NamedAreaExtended">
   <xs:sequence>
      <xs:element name="namedAreaCode" type="locx:NamedAreaCode" minOccurs="1" maxOccurs="1"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SupplementaryPositionalDescriptionExtended

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

**Name** SupplementaryPositionalDescriptionExtended

**Abstract** no

**Documentation** Extension of class SupplementaryPositionalDescription.

**XML Instance Representation**

```
<...>
   <locx:houseNumberSide> locx:_HouseNumberSideEnum </locx:houseNumberSide> [0..1] ?
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SupplementaryPositionalDescriptionExtended">
   <xs:sequence>
      <xs:element name="houseNumberSide" type="locx:_HouseNumberSideEnum" minOccurs="0" maxOccurs="1"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _AddressLineTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < AddressLineTypeEnum (by restriction) < **_AddressLineTypeEnum** (by extension) |
| *Sub-types:* | None |

**Name** _AddressLineTypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   locx:AddressLineTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_AddressLineTypeEnum">
   <xs:simpleContent>
      <xs:extension base="locx:AddressLineTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _HouseNumberSideEnum

| | |
|---|---|
| *Super-types:* | xs:string < HouseNumberSideEnum (by restriction) < **_HouseNumberSideEnum** (by extension) |
| *Sub-types:* | None |

**Name** _HouseNumberSideEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   locx:HouseNumberSideEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_HouseNumberSideEnum">
   <xs:simpleContent>
      <xs:extension base="locx:HouseNumberSideEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

---

## Simple Type: AddressLineTypeEnum

*Super-types:* xs:string < **AddressLineTypeEnum** (by restriction)

*Sub-types:*
- _AddressLineTypeEnum (by extension)

**Name** AddressLineTypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'apartment'|'building'|'poBox'|'unit'|'region'|'town'|'districtTerritory'|'floor'|'street'|'houseNumber'|'generalTextLine'|'_extended'}

**Documentation** A list of supported address line types.

**Schema Component Representation**

```
<xs:simpleType name="AddressLineTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="apartment"/>
      <xs:enumeration value="building"/>
      <xs:enumeration value="poBox"/>
      <xs:enumeration value="unit"/>
      <xs:enumeration value="region"/>
      <xs:enumeration value="town"/>
      <xs:enumeration value="districtTerritory"/>
      <xs:enumeration value="floor"/>
      <xs:enumeration value="street"/>
      <xs:enumeration value="houseNumber"/>
      <xs:enumeration value="generalTextLine"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

---

## Simple Type: HouseNumberSideEnum

*Super-types:* xs:string < **HouseNumberSideEnum** (by restriction)

*Sub-types:*
- _HouseNumberSideEnum (by extension)

**Name** HouseNumberSideEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'odd'|'even'|'_extended'}

**Documentation** Specifies the side of the house number (even, odd).

**Schema Component Representation**

```
<xs:simpleType name="HouseNumberSideEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="odd"/>
      <xs:enumeration value="even"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

---

## Simple Type: NamedAreaCode

*Super-types:* com:String < **NamedAreaCode** (by restriction)

*Sub-types:* None

**Name** NamedAreaCode

**Content**

- **'String' super type was not found in this schema. Its facets could not be printed out.**
- *length* <= 8

**Documentation** Type for a short numeric or alphanumeric code identifying an area.

**Schema Component Representation**

```
<xs:simpleType name="NamedAreaCode">
  <xs:restriction base="com:String">
    <xs:maxLength value="8"/>
  </xs:restriction>
</xs:simpleType>
```

top

# DATEXII_3_LocationReferencing

## Table of Contents


- Schema Document Properties
- Global Definitions
  - Complex Type: **AlertCArea**
  - Complex Type: **AlertCDirection**
  - Complex Type: **AlertCLinear**
  - Complex Type: **AlertCLinearByCode**
  - Complex Type: **AlertCLocation**
  - Complex Type: **AlertCMethod2Linear**
  - Complex Type: **AlertCMethod2Point**
  - Complex Type: **AlertCMethod2PrimaryPointLocation**
  - Complex Type: **AlertCMethod2SecondaryPointLocation**
  - Complex Type: **AlertCMethod4Linear**
  - Complex Type: **AlertCMethod4Point**
  - Complex Type: **AlertCMethod4PrimaryPointLocation**
  - Complex Type: **AlertCMethod4SecondaryPointLocation**
  - Complex Type: **AlertCPoint**
  - Complex Type: **AltitudeConfidence**
  - Complex Type: **AreaDestination**
  - Complex Type: **AreaLocation**
  - Complex Type: **Carriageway**
  - Complex Type: **Destination**
  - Complex Type: **DistanceAlongLinearElement**
  - Complex Type: **DistanceFromLinearElementReferent**
  - Complex Type: **DistanceFromLinearElementStart**
  - Complex Type: **ExternalReferencing**
  - Complex Type: **GmlLineString**
  - Complex Type: **GmlLinearRing**
  - Complex Type: **GmlMultiPolygon**
  - Complex Type: **GmlPolygon**
  - Complex Type: **HeightCoordinate**
  - Complex Type: **IsoNamedArea**
  - Complex Type: **Itinerary**
  - Complex Type: **ItineraryByIndexedLocations**
  - Complex Type: **ItineraryByReference**
  - Complex Type: **Lane**
  - Complex Type: **LinearElement**
  - Complex Type: **LinearElementByCode**
  - Complex Type: **LinearElementByLineString**
  - Complex Type: **LinearElementByPoints**
  - Complex Type: **LinearLocation**
  - Complex Type: **LinearWithinLinearElement**
  - Complex Type: **Location**
  - Complex Type: **LocationByReference**
  - Complex Type: **LocationGroup**
  - Complex Type: **LocationGroupByList**
  - Complex Type: **LocationGroupByReference**
  - Complex Type: **LocationReference**
  - Complex Type: **NamedArea**
  - Complex Type: **NetworkLocation**
  - Complex Type: **NutsNamedArea**
  - Complex Type: **OffsetDistance**
  - Complex Type: **OpenlrAreaLocationReference**
  - Complex Type: **OpenlrBasePointLocation**
  - Complex Type: **OpenlrBaseReferencePoint**
  - Complex Type: **OpenlrCircleLocationReference**
  - Complex Type: **OpenlrClosedLineLocationReference**
  - Complex Type: **OpenlrGeoCoordinate**
  - Complex Type: **OpenlrGridLocationReference**
  - Complex Type: **OpenlrLastLocationReferencePoint**
  - Complex Type: **OpenlrLineAttributes**
  - Complex Type: **OpenlrLineLocationReference**
  - Complex Type: **OpenlrLinear**
  - Complex Type: **OpenlrLocationReferencePoint**
  - Complex Type: **OpenlrOffsets**
  - Complex Type: **OpenlrPathAttributes**
  - Complex Type: **OpenlrPoiWithAccessPoint**
  - Complex Type: **OpenlrPointAlongLine**
  - Complex Type: **OpenlrPointLocationReference**
  - Complex Type: **OpenlrPolygonCorners**
  - Complex Type: **OpenlrPolygonLocationReference**
  - Complex Type: **OpenlrRectangle**
  - Complex Type: **OpenlrRectangleLocationReference**
  - Complex Type: **PercentageDistanceAlongLinearElement**
  - Complex Type: **PointAlongLinearElement**
  - Complex Type: **PointByCoordinates**
  - Complex Type: **PointCoordinates**
  - Complex Type: **PointDestination**
  - Complex Type: **PointLocation**
  - Complex Type: **PositionAccuracy**
  - Complex Type: **PositionConfidenceEllipse**
  - Complex Type: **Referent**
  - Complex Type: **RoadInformation**
  - Complex Type: **SingleRoadLinearLocation**
  - Complex Type: **SupplementaryPositionalDescription**
  - Complex Type: **TpegAreaDescriptor**
  - Complex Type: **TpegAreaLocation**
  - Complex Type: **TpegDescriptor**
  - Complex Type: **TpegFramedPoint**
  - Complex Type: **TpegGeometricArea**
  - Complex Type: **TpegHeight**
  - Complex Type: **TpegIlcPointDescriptor**
  - Complex Type: **TpegJunction**
  - Complex Type: **TpegJunctionPointDescriptor**
  - Complex Type: **TpegLinearLocation**
  - Complex Type: **TpegNamedOnlyArea**
  - Complex Type: **TpegNonJunctionPoint**
  - Complex Type: **TpegOtherPointDescriptor**

- Complex Type: **TpegPoint**
- Complex Type: **TpegPointDescriptor**
- Complex Type: **TpegPointLocation**
- Complex Type: **TpegSimplePoint**
- Complex Type: **_AlertCDirectionEnum**
- Complex Type: **_AltitudeAccuracyEnum**
- Complex Type: **_AreaPlacesEnum**
- Complex Type: **_CarriagewayEnum**
- Complex Type: **_DirectionEnum**
- Complex Type: **_DirectionPurposeEnum**
- Complex Type: **_GeographicCharacteristicEnum**
- Complex Type: **_HeightGradeEnum**
- Complex Type: **_HeightTypeEnum**
- Complex Type: **_InfrastructureDescriptorEnum**
- Complex Type: **_IntermediatePointOnLinearElement**
- Complex Type: **_LaneEnum**
- Complex Type: **_LinearDirectionEnum**
- Complex Type: **_LinearElementNatureEnum**
- Complex Type: **_LocationContainedInItinerary**
- Complex Type: **_LocationReferenceExtensionType**
- Complex Type: **_NamedAreaExtensionType**
- Complex Type: **_NamedAreaTypeEnum**
- Complex Type: **_NutsCodeTypeEnum**
- Complex Type: **_OpenlrFormOfWayEnum**
- Complex Type: **_OpenlrFunctionalRoadClassEnum**
- Complex Type: **_OpenlrOrientationEnum**
- Complex Type: **_OpenlrSideOfRoadEnum**
- Complex Type: **_PositionConfidenceCodedErrorEnum**
- Complex Type: **_PredefinedItineraryVersionedReference**
- Complex Type: **_PredefinedLocationGroupVersionedReference**
- Complex Type: **_PredefinedLocationVersionedReference**
- Complex Type: **_ReferentTypeEnum**
- Complex Type: **_RelativePositionOnCarriagewayEnum**
- Complex Type: **_SubdivisionTypeEnum**
- Complex Type: **_SupplementaryPositionalDescriptionExtensionType**
- Complex Type: **_TpegLoc01AreaLocationSubtypeEnum**
- Complex Type: **_TpegLoc01FramedPointLocationSubtypeEnum**
- Complex Type: **_TpegLoc01LinearLocationSubtypeEnum**
- Complex Type: **_TpegLoc01SimplePointLocationSubtypeEnum**
- Complex Type: **_TpegLoc03AreaDescriptorSubtypeEnum**
- Complex Type: **_TpegLoc03IlcPointDescriptorSubtypeEnum**
- Complex Type: **_TpegLoc03JunctionPointDescriptorSubtypeEnum**
- Complex Type: **_TpegLoc03OtherPointDescriptorSubtypeEnum**
- Complex Type: **_TpegLoc04HeightTypeEnum**
- Simple Type: **AlertCDirectionEnum**
- Simple Type: **AlertCLocationCode**
- Simple Type: **AltitudeAccuracyEnum**
- Simple Type: **AreaPlacesEnum**
- Simple Type: **CarriagewayEnum**
- Simple Type: **DirectionEnum**
- Simple Type: **DirectionPurposeEnum**
- Simple Type: **GeographicCharacteristicEnum**
- Simple Type: **GmlPosList**
- Simple Type: **HeightGradeEnum**
- Simple Type: **HeightTypeEnum**
- Simple Type: **InfrastructureDescriptorEnum**
- Simple Type: **LaneEnum**
- Simple Type: **LinearDirectionEnum**
- Simple Type: **LinearElementNatureEnum**
- Simple Type: **NamedAreaTypeEnum**
- Simple Type: **NutsCode**
- Simple Type: **NutsCodeTypeEnum**
- Simple Type: **OpenlrFormOfWayEnum**
- Simple Type: **OpenlrFunctionalRoadClassEnum**
- Simple Type: **OpenlrOrientationEnum**
- Simple Type: **OpenlrSideOfRoadEnum**
- Simple Type: **PositionConfidenceCodedErrorEnum**
- Simple Type: **ReferentTypeEnum**
- Simple Type: **RelativePositionOnCarriagewayEnum**
- Simple Type: **SubdivisionCode**
- Simple Type: **SubdivisionTypeEnum**
- Simple Type: **TpegLoc01AreaLocationSubtypeEnum**
- Simple Type: **TpegLoc01FramedPointLocationSubtypeEnum**
- Simple Type: **TpegLoc01LinearLocationSubtypeEnum**
- Simple Type: **TpegLoc01SimplePointLocationSubtypeEnum**
- Simple Type: **TpegLoc03AreaDescriptorSubtypeEnum**
- Simple Type: **TpegLoc03IlcPointDescriptorSubtypeEnum**
- Simple Type: **TpegLoc03JunctionPointDescriptorSubtypeEnum**
- Simple Type: **TpegLoc03OtherPointDescriptorSubtypeEnum**
- Simple Type: **TpegLoc04HeightTypeEnum**

top

## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/locationReferencing** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd)<br>  ◦ *http://datex2.eu/schema/3/locationExtension* (at DATEXII_3_LocationExtension.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |

| | |
|---|---|
| xs | http://www.w3.org/2001/XMLSchema |
| com | http://datex2.eu/schema/3/common |
| locx | http://datex2.eu/schema/3/locationExtension |
| loc | **http://datex2.eu/schema/3/locationReferencing** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" version="3.3"
targetNamespace="http://datex2.eu/schema/3/locationReferencing">
   <xs:import namespace="http://datex2.eu/schema/3/common" schemaLocation="DATEXII_3_Common.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/locationExtension"
   schemaLocation="DATEXII_3_LocationExtension.xsd"/>
   ...
</xs:schema>
```

top

## Global Definitions

### Complex Type: AlertCArea

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCArea |
| **Abstract** | no |
| **Documentation** | An area defined by reference to a predefined ALERT-C location table. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:areaLocation> loc:AlertCLocation </loc:areaLocation> [1] ?
   <loc:_alertCAreaExtension> com:_ExtensionType </loc:_alertCAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCArea">
   <xs:sequence>
      <xs:element name="alertCLocationCountryCode" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableNumber" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableVersion" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="areaLocation" type="loc:AlertCLocation"/>
      <xs:element name="_alertCAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

### Complex Type: AlertCDirection

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCDirection |
| **Abstract** | no |
| **Documentation** | The direction of traffic flow along the road to which the information relates. |

**XML Instance Representation**

```
<...>
   <loc:alertCDirectionCoded> loc:_AlertCDirectionEnum </loc:alertCDirectionCoded> [1] ?
   <loc:alertCDirectionNamed> com:MultilingualString </loc:alertCDirectionNamed> [0..1] ?
   <loc:alertCAffectedDirection> loc:_LinearDirectionEnum </loc:alertCAffectedDirection> [1] ?
   <loc:_alertCDirectionExtension> com:_ExtensionType </loc:_alertCDirectionExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCDirection">
   <xs:sequence>
      <xs:element name="alertCDirectionCoded" type="loc:_AlertCDirectionEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCDirectionNamed" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="alertCAffectedDirection" type="loc:_LinearDirectionEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_alertCDirectionExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

### Complex Type: AlertCLinear

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • AlertCLinearByCode (by extension)<br>• AlertCMethod2Linear (by extension)<br>• AlertCMethod4Linear (by extension) |

| | |
|---|---|
| **Name** | AlertCLinear |
| **Abstract** | yes |
| **Documentation** | A linear section along a road defined between two points on the road by reference to a pre-defined ALERT-C location table. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCLinearExtension> com:_ExtensionType </loc:_alertCLinearExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCLinear" abstract="true">
   <xs:sequence>
      <xs:element name="alertCLocationCountryCode" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableNumber" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableVersion" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_alertCLinearExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCLinearByCode

| | |
|---|---|
| *Super-types:* | AlertCLinear < **AlertCLinearByCode** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCLinearByCode |
| **Abstract** | no |
| **Documentation** | A linear section along a road defined by reference to a linear section in a pre-defined ALERT-C location table. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCLinearExtension> com:_ExtensionType </loc:_alertCLinearExtension> [0..1]
   <loc:alertCDirection> loc:AlertCDirection </loc:alertCDirection> [1]
   <loc:locationCodeForLinearLocation> loc:AlertCLocation </loc:locationCodeForLinearLocation> [1] ?
   <loc:_alertCLinearByCodeExtension> com:_ExtensionType </loc:_alertCLinearByCodeExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCLinearByCode">
   <xs:complexContent>
      <xs:extension base="loc:AlertCLinear">
         <xs:sequence>
            <xs:element name="alertCDirection" type="loc:AlertCDirection"/>
            <xs:element name="locationCodeForLinearLocation" type="loc:AlertCLocation"/>
            <xs:element name="_alertCLinearByCodeExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: AlertCLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCLocation |
| **Abstract** | no |
| **Documentation** | Identification of a specific point, linear or area location in an ALERT-C location table. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationName> com:MultilingualString </loc:alertCLocationName> [0..1] ?
   <loc:specificLocation> loc:AlertCLocationCode </loc:specificLocation> [1] ?
   <loc:_alertCLocationExtension> com:_ExtensionType </loc:_alertCLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCLocation">
   <xs:sequence>
      <xs:element name="alertCLocationName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="specificLocation" type="loc:AlertCLocationCode" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_alertCLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCMethod2Linear

| | |
|---|---|
| *Super-types:* | AlertCLinear < **AlertCMethod2Linear** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod2Linear |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCLinearExtension> com:_ExtensionType </loc:_alertCLinearExtension> [0..1]
   <loc:alertCDirection> loc:AlertCDirection </loc:alertCDirection> [1]
   <loc:alertCMethod2PrimaryPointLocation> loc:AlertCMethod2PrimaryPointLocation
   </loc:alertCMethod2PrimaryPointLocation> [1]
   <loc:alertCMethod2SecondaryPointLocation> loc:AlertCMethod2SecondaryPointLocation
   </loc:alertCMethod2SecondaryPointLocation> [1]
   <loc:_alertCMethod2LinearExtension> com:_ExtensionType </loc:_alertCMethod2LinearExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod2Linear">
   <xs:complexContent>
      <xs:extension base="loc:AlertCLinear">
         <xs:sequence>
            <xs:element name="alertCDirection" type="loc:AlertCDirection"/>
            <xs:element name="alertCMethod2PrimaryPointLocation" type="loc:AlertCMethod2PrimaryPointLocation"/>
            <xs:element name="alertCMethod2SecondaryPointLocation" type="loc:AlertCMethod2SecondaryPointLocation"/>
            <xs:element name="_alertCMethod2LinearExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: AlertCMethod2Point

| | |
|---|---|
| *Super-types:* | AlertCPoint < **AlertCMethod2Point** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod2Point |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCPointExtension> com:_ExtensionType </loc:_alertCPointExtension> [0..1]
   <loc:alertCDirection> loc:AlertCDirection </loc:alertCDirection> [1]
   <loc:alertCMethod2PrimaryPointLocation> loc:AlertCMethod2PrimaryPointLocation
   </loc:alertCMethod2PrimaryPointLocation> [1]
   <loc:_alertCMethod2PointExtension> com:_ExtensionType </loc:_alertCMethod2PointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod2Point">
   <xs:complexContent>
      <xs:extension base="loc:AlertCPoint">
         <xs:sequence>
            <xs:element name="alertCDirection" type="loc:AlertCDirection"/>
            <xs:element name="alertCMethod2PrimaryPointLocation" type="loc:AlertCMethod2PrimaryPointLocation"/>
            <xs:element name="_alertCMethod2PointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: AlertCMethod2PrimaryPointLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod2PrimaryPointLocation |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocation> loc:AlertCLocation </loc:alertCLocation> [1]
   <loc:_alertCMethod2PrimaryPointLocationExtension> com:_ExtensionType
   </loc:_alertCMethod2PrimaryPointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod2PrimaryPointLocation">
   <xs:sequence>
      <xs:element name="alertCLocation" type="loc:AlertCLocation"/>
      <xs:element name="_alertCMethod2PrimaryPointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCMethod2SecondaryPointLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod2SecondaryPointLocation |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocation> loc:AlertCLocation </loc:alertCLocation> [1]
   <loc:_alertCMethod2SecondaryPointLocationExtension> com:_ExtensionType
   </loc:_alertCMethod2SecondaryPointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod2SecondaryPointLocation">
   <xs:sequence>
      <xs:element name="alertCLocation" type="loc:AlertCLocation"/>
      <xs:element name="_alertCMethod2SecondaryPointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCMethod4Linear

| | |
|---|---|
| *Super-types:* | AlertCLinear < **AlertCMethod4Linear** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod4Linear |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCLinearExtension> com:_ExtensionType </loc:_alertCLinearExtension> [0..1]
   <loc:alertCMethod4PrimaryPointLocation> loc:AlertCMethod4PrimaryPointLocation
   </loc:alertCMethod4PrimaryPointLocation> [1]
   <loc:alertCMethod4SecondaryPointLocation> loc:AlertCMethod4SecondaryPointLocation
   </loc:alertCMethod4SecondaryPointLocation> [1]
   <loc:_alertCMethod4LinearExtension> com:_ExtensionType </loc:_alertCMethod4LinearExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod4Linear">
   <xs:complexContent>
      <xs:extension base="loc:AlertCLinear">
         <xs:sequence>
            <xs:element name="alertCMethod4PrimaryPointLocation" type="loc:AlertCMethod4PrimaryPointLocation"/>
            <xs:element name="alertCMethod4SecondaryPointLocation" type="loc:AlertCMethod4SecondaryPointLocation"/>
            <xs:element name="_alertCMethod4LinearExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: AlertCMethod4Point

| | |
|---|---|
| *Super-types:* | AlertCPoint < **AlertCMethod4Point** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod4Point |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCPointExtension> com:_ExtensionType </loc:_alertCPointExtension> [0..1]
   <loc:alertCDirection> loc:AlertCDirection </loc:alertCDirection> [1]
   <loc:alertCMethod4PrimaryPointLocation> loc:AlertCMethod4PrimaryPointLocation
   </loc:alertCMethod4PrimaryPointLocation> [1]
   <loc:_alertCMethod4PointExtension> com:_ExtensionType </loc:_alertCMethod4PointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod4Point">
   <xs:complexContent>
      <xs:extension base="loc:AlertCPoint">
         <xs:sequence>
            <xs:element name="alertCDirection" type="loc:AlertCDirection"/>
            <xs:element name="alertCMethod4PrimaryPointLocation" type="loc:AlertCMethod4PrimaryPointLocation"/>
            <xs:element name="_alertCMethod4PointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: AlertCMethod4PrimaryPointLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod4PrimaryPointLocation |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocation> loc:AlertCLocation </loc:alertCLocation> [1]
   <loc:offsetDistance> loc:OffsetDistance </loc:offsetDistance> [1]
   <loc:_alertCMethod4PrimaryPointLocationExtension> com:_ExtensionType
   </loc:_alertCMethod4PrimaryPointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod4PrimaryPointLocation">
   <xs:sequence>
      <xs:element name="alertCLocation" type="loc:AlertCLocation"/>
      <xs:element name="offsetDistance" type="loc:OffsetDistance"/>
      <xs:element name="_alertCMethod4PrimaryPointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCMethod4SecondaryPointLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCMethod4SecondaryPointLocation |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:_alertCMethod4SecondaryPointLocationExtension> com:_ExtensionType
   </loc:_alertCMethod4SecondaryPointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCMethod4SecondaryPointLocation">
   <xs:sequence>
      <xs:element name="_alertCMethod4SecondaryPointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AlertCPoint

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • AlertCMethod2Point (by extension)<br>• AlertCMethod4Point (by extension) |

| | |
|---|---|
| **Name** | AlertCPoint |
| **Abstract** | yes |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:alertCLocationCountryCode> com:String </loc:alertCLocationCountryCode> [1] ?
   <loc:alertCLocationTableNumber> com:String </loc:alertCLocationTableNumber> [1] ?
   <loc:alertCLocationTableVersion> com:String </loc:alertCLocationTableVersion> [1] ?
   <loc:_alertCPointExtension> com:_ExtensionType </loc:_alertCPointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AlertCPoint" abstract="true">
   <xs:sequence>
      <xs:element name="alertCLocationCountryCode" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableNumber" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="alertCLocationTableVersion" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_alertCPointExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AltitudeConfidence

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AltitudeConfidence |
| **Abstract** | no |
| **Documentation** | Evaluation of the altitude confidence assessed according to ETSI ISO 102894-2 |

**XML Instance Representation**

```
<...>
   <loc:altitudeAccuracyCodedValue> loc:_AltitudeAccuracyEnum </loc:altitudeAccuracyCodedValue> [0..1] ?
   <loc:altitudeAccuracyCodedError> loc:_PositionConfidenceCodedErrorEnum </loc:altitudeAccuracyCodedError> [0..1] ?
   <loc:_altitudeConfidenceExtension> com:_ExtensionType </loc:_altitudeConfidenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AltitudeConfidence">
   <xs:sequence>
      <xs:element name="altitudeAccuracyCodedValue" type="loc:_AltitudeAccuracyEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="altitudeAccuracyCodedError" type="loc:_PositionConfidenceCodedErrorEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="_altitudeConfidenceExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AreaDestination

| | |
|---|---|
| *Super-types:* | Destination < **AreaDestination** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AreaDestination |
| **Abstract** | no |
| **Documentation** | The specification of the destination of a defined route or itinerary which is an area. |

**XML Instance Representation**

```
<...>
   <loc:_destinationExtension> com:_ExtensionType </loc:_destinationExtension> [0..1]
   <loc:areaLocation> loc:AreaLocation </loc:areaLocation> [1]
   <loc:_areaDestinationExtension> com:_ExtensionType </loc:_areaDestinationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AreaDestination">
   <xs:complexContent>
      <xs:extension base="loc:Destination">
         <xs:sequence>
            <xs:element name="areaLocation" type="loc:AreaLocation"/>
            <xs:element name="_areaDestinationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
```

```
</xs:complexType>
```

top

## Complex Type: AreaLocation

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < **AreaLocation** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AreaLocation |
| **Abstract** | no |
| **Documentation** | Location representing a geographic or geometric defined area which may be qualified by height information to provide additional geospatial discrimination (e.g. for snow in an area but only above a certain altitude). |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:areasAtWhichApplicable> loc:_AreaPlacesEnum </loc:areasAtWhichApplicable> [0..1] ?
   <loc:alertCArea> loc:AlertCArea </loc:alertCArea> [0..*]
   <loc:tpegAreaLocation> loc:TpegAreaLocation </loc:tpegAreaLocation> [0..1]
   <loc:namedArea> loc:NamedArea </loc:namedArea> [0..1]
   <loc:gmlMultiPolygon> loc:GmlMultiPolygon </loc:gmlMultiPolygon> [0..1]
   <loc:openlrAreaLocationReference> loc:OpenlrAreaLocationReference </loc:openlrAreaLocationReference> [0..1]
   <loc:_areaLocationExtension> com:_ExtensionType </loc:_areaLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AreaLocation">
   <xs:complexContent>
      <xs:extension base="loc:Location">
         <xs:sequence>
            <xs:element name="areasAtWhichApplicable" type="loc:_AreaPlacesEnum" minOccurs="0" maxOccurs="1"/>
            <xs:element name="alertCArea" type="loc:AlertCArea" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="tpegAreaLocation" type="loc:TpegAreaLocation" minOccurs="0"/>
            <xs:element name="namedArea" type="loc:NamedArea" minOccurs="0"/>
            <xs:element name="gmlMultiPolygon" type="loc:GmlMultiPolygon" minOccurs="0"/>
            <xs:element name="openlrAreaLocationReference" type="loc:OpenlrAreaLocationReference" minOccurs="0"/>
            <xs:element name="_areaLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: Carriageway

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Carriageway |
| **Abstract** | no |
| **Documentation** | Supplementary positional information which details carriageway and lane locations. Several instances may exist where the element being described extends over more than one carriageway. |

**XML Instance Representation**

```
<...>
   <loc:carriageway> loc:_CarriagewayEnum </loc:carriageway> [1] ?
   <loc:originalNumberOfLanes> com:Integer </loc:originalNumberOfLanes> [0..1] ?
   <loc:lane> loc:Lane </loc:lane> [0..*]
   <loc:_carriagewayExtension> com:_ExtensionType </loc:_carriagewayExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Carriageway">
   <xs:sequence>
      <xs:element name="carriageway" type="loc:_CarriagewayEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="originalNumberOfLanes" type="com:Integer" minOccurs="0" maxOccurs="1"/>
      <xs:element name="lane" type="loc:Lane" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="_carriagewayExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: Destination

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • AreaDestination (by extension)<br>• PointDestination (by extension) |

| | |
|---|---|
| **Name** | Destination |
| **Abstract** | yes |

| | |
|---|---|
| **Documentation** | The specification of a destination. This may be either a point location or an area location. |

**XML Instance Representation**

```
<...>
   <loc:_destinationExtension> com:_ExtensionType </loc:_destinationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Destination" abstract="true">
   <xs:sequence>
      <xs:element name="_destinationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: DistanceAlongLinearElement

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • DistanceFromLinearElementReferent (by extension)<br>• DistanceFromLinearElementStart (by extension)<br>• PercentageDistanceAlongLinearElement (by extension) |

| | |
|---|---|
| **Name** | DistanceAlongLinearElement |
| **Abstract** | yes |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:_distanceAlongLinearElementExtension> com:_ExtensionType </loc:_distanceAlongLinearElementExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DistanceAlongLinearElement" abstract="true">
   <xs:sequence>
      <xs:element name="_distanceAlongLinearElementExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: DistanceFromLinearElementReferent

| | |
|---|---|
| *Super-types:* | DistanceAlongLinearElement < **DistanceFromLinearElementReferent** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | DistanceFromLinearElementReferent |
| **Abstract** | no |
| **Documentation** | 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". |

**XML Instance Representation**

```
<...>
   <loc:_distanceAlongLinearElementExtension> com:_ExtensionType </loc:_distanceAlongLinearElementExtension> [0..1]
   <loc:distanceAlong> com:MetresAsFloat </loc:distanceAlong> [1] ?
   <loc:fromReferent> loc:Referent </loc:fromReferent> [1] ?
   <loc:towardsReferent> loc:Referent </loc:towardsReferent> [0..1] ?
   <loc:_distanceFromLinearElementReferentExtension> com:_ExtensionType
   </loc:_distanceFromLinearElementReferentExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DistanceFromLinearElementReferent">
   <xs:complexContent>
      <xs:extension base="loc:DistanceAlongLinearElement">
         <xs:sequence>
            <xs:element name="distanceAlong" type="com:MetresAsFloat" minOccurs="1" maxOccurs="1"/>
            <xs:element name="fromReferent" type="loc:Referent"/>
            <xs:element name="towardsReferent" type="loc:Referent" minOccurs="0"/>
            <xs:element name="_distanceFromLinearElementReferentExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: DistanceFromLinearElementStart

| | |
|---|---|
| *Super-types:* | DistanceAlongLinearElement < **DistanceFromLinearElementStart** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | DistanceFromLinearElementStart |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:_distanceAlongLinearElementExtension> com:_ExtensionType </loc:_distanceAlongLinearElementExtension> [0..1]
   <loc:distanceAlong> com:MetresAsFloat </loc:distanceAlong> [1] ?
   <loc:_distanceFromLinearElementStartExtension> com:_ExtensionType </loc:_distanceFromLinearElementStartExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DistanceFromLinearElementStart">
   <xs:complexContent>
      <xs:extension base="loc:DistanceAlongLinearElement">
         <xs:sequence>
            <xs:element name="distanceAlong" type="com:MetresAsFloat" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_distanceFromLinearElementStartExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: ExternalReferencing

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | ExternalReferencing |
| **Abstract** | no |
| **Documentation** | A location defined by reference to an external/other referencing system. |

**XML Instance Representation**

```
<...>
   <loc:externalLocationCode> com:String </loc:externalLocationCode> [1] ?
   <loc:externalReferencingSystem> com:String </loc:externalReferencingSystem> [1] ?
   <loc:_externalReferencingExtension> com:_ExtensionType </loc:_externalReferencingExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="ExternalReferencing">
   <xs:sequence>
      <xs:element name="externalLocationCode" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="externalReferencingSystem" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_externalReferencingExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: GmlLineString

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • GmlLinearRing (by extension) |

| | |
|---|---|
| **Name** | GmlLineString |
| **Abstract** | no |
| **Documentation** | Line string based on GML (EN ISO 19136) definition: a curve defined by a series of two or more coordinate tuples. Unlike GML may be self-intersecting. If srsName attribute is not present, posList is assumed to use "ETRS89-LatLonh" reference system. |

**XML Instance Representation**

```
<...
 srsDimension="com:NonNegativeInteger [0..1] ?"
 srsName="com:String [0..1] ?">
   <loc:posList> loc:GmlPosList </loc:posList> [1] ?
   <loc:_gmlLineStringExtension> com:_ExtensionType </loc:_gmlLineStringExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="GmlLineString">
   <xs:sequence>
      <xs:element name="posList" type="loc:GmlPosList" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_gmlLineStringExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
   <xs:attribute name="srsDimension" type="com:NonNegativeInteger" use="optional"/>
   <xs:attribute name="srsName" type="com:String" use="optional"/>
</xs:complexType>
```

top

## Complex Type: GmlLinearRing

| | |
|---|---|
| *Super-types:* | GmlLineString < **GmlLinearRing** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | GmlLinearRing |
| **Abstract** | no |
| **Documentation** | Closed line string not self-intersecting (i.e. having as last point the first point) |

**XML Instance Representation**

```
<...
 srsDimension="com:NonNegativeInteger [0..1] ?"
 srsName="com:String [0..1] ?">
   <loc:posList> loc:GmlPosList </loc:posList> [1] ?
   <loc:_gmlLineStringExtension> com:_ExtensionType </loc:_gmlLineStringExtension> [0..1]
   <loc:_gmlLinearRingExtension> com:_ExtensionType </loc:_gmlLinearRingExtension> [0..1]
</.../>
```

**Schema Component Representation**

```
<xs:complexType name="GmlLinearRing">
   <xs:complexContent>
      <xs:extension base="loc:GmlLineString">
         <xs:sequence>
            <xs:element name="_gmlLinearRingExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: GmlMultiPolygon

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | GmlMultiPolygon |
| **Abstract** | no |
| **Documentation** | An area defined by a set of polygons acording to GML (EN ISO 19136). |

**XML Instance Representation**

```
<.../>
   <loc:gmlAreaName> com:MultilingualString </loc:gmlAreaName> [0..1] ?
   <loc:gmlPolygon> loc:GmlPolygon </loc:gmlPolygon> [1..*]
   <loc:_gmlMultiPolygonExtension> com:_ExtensionType </loc:_gmlMultiPolygonExtension> [0..1]
</.../>
```

**Schema Component Representation**

```
<xs:complexType name="GmlMultiPolygon">
   <xs:sequence>
      <xs:element name="gmlAreaName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="gmlPolygon" type="loc:GmlPolygon" maxOccurs="unbounded"/>
      <xs:element name="_gmlMultiPolygonExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: GmlPolygon

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | GmlPolygon |
| **Abstract** | no |
| **Documentation** | Planar surface defined by 1 exterior boundary and 0 or more interior boundaries |

**XML Instance Representation**

```
<.../>
   <loc:exterior> loc:GmlLinearRing </loc:exterior> [1] ?
   <loc:interior> loc:GmlLinearRing </loc:interior> [0..*] ?
   <loc:_gmlPolygonExtension> com:_ExtensionType </loc:_gmlPolygonExtension> [0..1]
</.../>
```

**Schema Component Representation**

```
<xs:complexType name="GmlPolygon">
   <xs:sequence>
      <xs:element name="exterior" type="loc:GmlLinearRing"/>
      <xs:element name="interior" type="loc:GmlLinearRing" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="_gmlPolygonExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: HeightCoordinate

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | HeightCoordinate |
| **Abstract** | no |
| **Documentation** | Third coordinate for points defined geodetically |

**XML Instance Representation**

```
<...>
   <loc:heightValue> com:MetresAsFloat </loc:heightValue> [1] ?
   <loc:heightType> loc:_HeightTypeEnum </loc:heightType> [0..1] ?
   <loc:altitudeConfidence> loc:AltitudeConfidence </loc:altitudeConfidence> [0..1]
   <loc:verticalPositionAccuracy> loc:PositionAccuracy </loc:verticalPositionAccuracy> [0..1] ?
   <loc:_heightCoordinateExtension> com:_ExtensionType </loc:_heightCoordinateExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="HeightCoordinate">
   <xs:sequence>
      <xs:element name="heightValue" type="com:MetresAsFloat" minOccurs="1" maxOccurs="1"/>
      <xs:element name="heightType" type="loc:_HeightTypeEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="altitudeConfidence" type="loc:AltitudeConfidence" minOccurs="0"/>
      <xs:element name="verticalPositionAccuracy" type="loc:PositionAccuracy" minOccurs="0"/>
      <xs:element name="_heightCoordinateExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: IsoNamedArea

| | |
|---|---|
| *Super-types:* | NamedArea < NamedArea (by extension) < **IsoNamedArea** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | IsoNamedArea |
| **Abstract** | no |
| **Documentation** | The ISO 3166-2 representation for the named area. |

**XML Instance Representation**

```
<...>
   <!-- 'com:NamedArea' super type was not found in this schema. Some elements and attributes may be missing. -->
   <loc:areaName> com:MultilingualString </loc:areaName> [1] ?
   <loc:namedAreaType> loc:_NamedAreaTypeEnum </loc:namedAreaType> [0..1] ?
   <loc:country> com:CountryCode </loc:country> [0..1] ?
   <loc:_namedAreaExtension> loc:_NamedAreaExtensionType </loc:_namedAreaExtension> [0..1]
   <loc:subdivisionType> loc:_SubdivisionTypeEnum </loc:subdivisionType> [1] ?
   <loc:subdivisionCode> loc:SubdivisionCode </loc:subdivisionCode> [1] ?
   <loc:_isoNamedAreaExtension> com:_ExtensionType </loc:_isoNamedAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="IsoNamedArea">
   <xs:complexContent>
      <xs:extension base="loc:NamedArea">
         <xs:sequence>
            <xs:element name="subdivisionType" type="loc:_SubdivisionTypeEnum" minOccurs="1" maxOccurs="1"/>
            <xs:element name="subdivisionCode" type="loc:SubdivisionCode" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_isoNamedAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: Itinerary

| | |
|---|---|
| *Super-types:* | LocationReference < **Itinerary** (by extension) |
| *Sub-types:* | • ItineraryByIndexedLocations (by extension)<br>• ItineraryByReference (by extension) |

| | |
|---|---|
| **Name** | Itinerary |
| **Abstract** | yes |
| **Documentation** | Multiple (i.e. more than one) physically separate locations arranged as an ordered set that defines an itinerary or route. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:routeDestination> loc:Destination </loc:routeDestination> [0..*] ?
   <loc:_itineraryExtension> com:_ExtensionType </loc:_itineraryExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Itinerary" abstract="true">
   <xs:complexContent>
```

```
    <xs:extension base="loc:LocationReference">
      <xs:sequence>
        <xs:element name="routeDestination" type="loc:Destination" minOccurs="0" maxOccurs="unbounded"/>
        <xs:element name="_itineraryExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: ItineraryByIndexedLocations

| | |
|---|---|
| *Super-types:* | LocationReference < Itinerary (by extension) < **ItineraryByIndexedLocations** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | ItineraryByIndexedLocations |
| **Abstract** | no |
| **Documentation** | Multiple physically separate locations arranged as an ordered set that defines an itinerary or route. The index qualifier indicates the order. |

**XML Instance Representation**

```
<...>
  <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
  <loc:routeDestination> loc:Destination </loc:routeDestination> [0..*] ?
  <loc:_itineraryExtension> com:_ExtensionType </loc:_itineraryExtension> [0..1]
  <loc:locationContainedInItinerary> loc:_LocationContainedInItinerary </loc:locationContainedInItinerary> [0..*] ?
  <loc:_itineraryByIndexedLocationsExtension> com:_ExtensionType </loc:_itineraryByIndexedLocationsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="ItineraryByIndexedLocations">
  <xs:complexContent>
    <xs:extension base="loc:Itinerary">
      <xs:sequence>
        <xs:element name="locationContainedInItinerary" type="loc:_LocationContainedInItinerary" minOccurs="0"
        maxOccurs="unbounded"/>
        <xs:element name="_itineraryByIndexedLocationsExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: ItineraryByReference

| | |
|---|---|
| *Super-types:* | LocationReference < Itinerary (by extension) < **ItineraryByReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | ItineraryByReference |
| **Abstract** | no |
| **Documentation** | Multiple (i.e. more than one) physically separate locations which are ordered that constitute an itinerary or route where they are defined by reference to a predefined itinerary. |

**XML Instance Representation**

```
<...>
  <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
  <loc:routeDestination> loc:Destination </loc:routeDestination> [0..*] ?
  <loc:_itineraryExtension> com:_ExtensionType </loc:_itineraryExtension> [0..1]
  <loc:predefinedItineraryReference> loc:_PredefinedItineraryVersionedReference </loc:predefinedItineraryReference>
  [1] ?
  <loc:_itineraryByReferenceExtension> com:_ExtensionType </loc:_itineraryByReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="ItineraryByReference">
  <xs:complexContent>
    <xs:extension base="loc:Itinerary">
      <xs:sequence>
        <xs:element name="predefinedItineraryReference" type="loc:_PredefinedItineraryVersionedReference"
        minOccurs="1" maxOccurs="1"/>
        <xs:element name="_itineraryByReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: Lane

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Lane |
| **Abstract** | no |

**Documentation** Indicates a specific lane or group of lanes.

**XML Instance Representation**

```
<...>
   <loc:laneNumber> com:Integer </loc:laneNumber> [0..1] ?
   <loc:laneUsage> loc:_LaneEnum </loc:laneUsage> [0..1] ?
   <loc:_laneExtension> com:_ExtensionType </loc:_laneExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Lane">
   <xs:sequence>
      <xs:element name="laneNumber" type="com:Integer" minOccurs="0" maxOccurs="1"/>
      <xs:element name="laneUsage" type="loc:_LaneEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_laneExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: LinearElement

*Super-types:* None

*Sub-types:*

- LinearElementByCode (by extension)
- LinearElementByLineString (by extension)
- LinearElementByPoints (by extension)

**Name** LinearElement

**Abstract** no

**Documentation** A linear element along a single linear object, consistent with EN ISO 19148 definitions.

**XML Instance Representation**

```
<...>
   <loc:roadName> com:MultilingualString </loc:roadName> [0..1] ?
   <loc:roadNumber> com:String </loc:roadNumber> [0..1] ?
   <loc:linearElementReferenceModel> com:String </loc:linearElementReferenceModel> [0..1] ?
   <loc:linearElementReferenceModelVersion> com:String </loc:linearElementReferenceModelVersion> [0..1] ?
   <loc:linearElementNature> loc:_LinearElementNatureEnum </loc:linearElementNature> [0..1] ?
   <loc:_linearElementExtension> com:_ExtensionType </loc:_linearElementExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearElement">
   <xs:sequence>
      <xs:element name="roadName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="roadNumber" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="linearElementReferenceModel" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="linearElementReferenceModelVersion" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="linearElementNature" type="loc:_LinearElementNatureEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_linearElementExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: LinearElementByCode

*Super-types:* LinearElement < **LinearElementByCode** (by extension)

*Sub-types:* None

**Name** LinearElementByCode

**Abstract** no

**Documentation** A linear element along a single linear object defined by its identifier or code in a road network reference model (specified in LinearElement class) which segments the road network according to specific business rules.

**XML Instance Representation**

```
<...>
   <loc:roadName> com:MultilingualString </loc:roadName> [0..1] ?
   <loc:roadNumber> com:String </loc:roadNumber> [0..1] ?
   <loc:linearElementReferenceModel> com:String </loc:linearElementReferenceModel> [0..1] ?
   <loc:linearElementReferenceModelVersion> com:String </loc:linearElementReferenceModelVersion> [0..1] ?
   <loc:linearElementNature> loc:_LinearElementNatureEnum </loc:linearElementNature> [0..1] ?
   <loc:_linearElementExtension> com:_ExtensionType </loc:_linearElementExtension> [0..1]
   <loc:linearElementIdentifier> com:String </loc:linearElementIdentifier> [1] ?
   <loc:_linearElementByCodeExtension> com:_ExtensionType </loc:_linearElementByCodeExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearElementByCode">
   <xs:complexContent>
      <xs:extension base="loc:LinearElement">
         <xs:sequence>
            <xs:element name="linearElementIdentifier" type="com:String" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_linearElementByCodeExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
```

```
</xs:complexType>
```

top

## Complex Type: LinearElementByLineString

| | |
|---|---|
| *Super-types:* | LinearElement < **LinearElementByLineString** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LinearElementByLineString |
| **Abstract** | no |
| **Documentation** | A linear element defined by a line string (class GmlLineString). |

**XML Instance Representation**

```
<...>
   <loc:roadName> com:MultilingualString </loc:roadName> [0..1] ?
   <loc:roadNumber> com:String </loc:roadNumber> [0..1] ?
   <loc:linearElementReferenceModel> com:String </loc:linearElementReferenceModel> [0..1] ?
   <loc:linearElementReferenceModelVersion> com:String </loc:linearElementReferenceModelVersion> [0..1] ?
   <loc:linearElementNature> loc:_LinearElementNatureEnum </loc:linearElementNature> [0..1] ?
   <loc:_linearElementExtension> com:_ExtensionType </loc:_linearElementExtension> [0..1]
   <loc:gmlLineString> loc:GmlLineString </loc:gmlLineString> [1]
   <loc:_linearElementByLineStringExtension> com:_ExtensionType </loc:_linearElementByLineStringExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearElementByLineString">
   <xs:complexContent>
      <xs:extension base="loc:LinearElement">
         <xs:sequence>
            <xs:element name="gmlLineString" type="loc:GmlLineString"/>
            <xs:element name="_linearElementByLineStringExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LinearElementByPoints

| | |
|---|---|
| *Super-types:* | LinearElement < **LinearElementByPoints** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LinearElementByPoints |
| **Abstract** | no |
| **Documentation** | A linear element along a single linear object defined by its start and end points. |

**XML Instance Representation**

```
<...>
   <loc:roadName> com:MultilingualString </loc:roadName> [0..1] ?
   <loc:roadNumber> com:String </loc:roadNumber> [0..1] ?
   <loc:linearElementReferenceModel> com:String </loc:linearElementReferenceModel> [0..1] ?
   <loc:linearElementReferenceModelVersion> com:String </loc:linearElementReferenceModelVersion> [0..1] ?
   <loc:linearElementNature> loc:_LinearElementNatureEnum </loc:linearElementNature> [0..1] ?
   <loc:_linearElementExtension> com:_ExtensionType </loc:_linearElementExtension> [0..1]
   <loc:startPointOfLinearElement> loc:Referent </loc:startPointOfLinearElement> [1] ?
   <loc:intermediatePointOnLinearElement> loc:_IntermediatePointOnLinearElement
   </loc:intermediatePointOnLinearElement> [0..*] ?
   <loc:endPointOfLinearElement> loc:Referent </loc:endPointOfLinearElement> [1] ?
   <loc:_linearElementByPointsExtension> com:_ExtensionType </loc:_linearElementByPointsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearElementByPoints">
   <xs:complexContent>
      <xs:extension base="loc:LinearElement">
         <xs:sequence>
            <xs:element name="startPointOfLinearElement" type="loc:Referent"/>
            <xs:element name="intermediatePointOnLinearElement" type="loc:_IntermediatePointOnLinearElement"
            minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="endPointOfLinearElement" type="loc:Referent"/>
            <xs:element name="_linearElementByPointsExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LinearLocation

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < NetworkLocation (by extension) < **LinearLocation** (by extension) |
| *Sub-types:* | • SingleRoadLinearLocation (by extension) |

| | |
|---|---|
| **Name** | LinearLocation |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | Location representing a linear section with optional directionality defined between two points. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:supplementaryPositionalDescription> loc:SupplementaryPositionalDescription
   </loc:supplementaryPositionalDescription> [0..1]
   <loc:destination> loc:Destination </loc:destination> [0..1]
   <loc:_networkLocationExtension> com:_ExtensionType </loc:_networkLocationExtension> [0..1]
   <loc:openlrLinear> loc:OpenlrLinear </loc:openlrLinear> [0..1]
   <loc:gmlLineString> loc:GmlLineString </loc:gmlLineString> [0..1]
   <loc:_linearLocationExtension> com:_ExtensionType </loc:_linearLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearLocation">
   <xs:complexContent>
      <xs:extension base="loc:NetworkLocation">
         <xs:sequence>
            <xs:element name="openlrLinear" type="loc:OpenlrLinear" minOccurs="0"/>
            <xs:element name="gmlLineString" type="loc:GmlLineString" minOccurs="0"/>
            <xs:element name="_linearLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LinearWithinLinearElement

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LinearWithinLinearElement |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:administrativeAreaOfLinearSection> com:MultilingualString </loc:administrativeAreaOfLinearSection> [0..1] ?
   <loc:directionOnLinearSection> loc:_DirectionEnum </loc:directionOnLinearSection> [0..1] ?
   <loc:directionRelativeOnLinearSection> loc:_LinearDirectionEnum </loc:directionRelativeOnLinearSection> [0..1] ?
   <loc:heightGradeOfLinearSection> loc:_HeightGradeEnum </loc:heightGradeOfLinearSection> [0..1] ?
   <loc:linearElement> loc:LinearElement </loc:linearElement> [1]
   <loc:fromPoint> loc:DistanceAlongLinearElement </loc:fromPoint> [1] ?
   <loc:toPoint> loc:DistanceAlongLinearElement </loc:toPoint> [1] ?
   <loc:_linearWithinLinearElementExtension> com:_ExtensionType </loc:_linearWithinLinearElementExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LinearWithinLinearElement">
   <xs:sequence>
      <xs:element name="administrativeAreaOfLinearSection" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="directionOnLinearSection" type="loc:_DirectionEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="directionRelativeOnLinearSection" type="loc:_LinearDirectionEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="heightGradeOfLinearSection" type="loc:_HeightGradeEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="linearElement" type="loc:LinearElement"/>
      <xs:element name="fromPoint" type="loc:DistanceAlongLinearElement"/>
      <xs:element name="toPoint" type="loc:DistanceAlongLinearElement"/>
      <xs:element name="_linearWithinLinearElementExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: Location

| | |
|---|---|
| *Super-types:* | LocationReference < **Location** (by extension) |
| *Sub-types:* | • AreaLocation (by extension)<br>• LocationByReference (by extension)<br>• NetworkLocation (by extension)<br>  ◦ LinearLocation (by extension)<br>  ▪ SingleRoadLinearLocation (by extension)<br>  ◦ PointLocation (by extension) |

| | |
|---|---|
| **Name** | Location |
| **Abstract** | yes |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
```

```
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Location" abstract="true">
   <xs:complexContent>
      <xs:extension base="loc:LocationReference">
         <xs:sequence>
            <xs:element name="externalReferencing" type="loc:ExternalReferencing" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="coordinatesForDisplay" type="loc:PointCoordinates" minOccurs="0"/>
            <xs:element name="_locationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LocationByReference

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < **LocationByReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LocationByReference |
| **Abstract** | no |
| **Documentation** | A location defined by reference to a predefined location. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:predefinedLocationReference> loc:_PredefinedLocationVersionedReference </loc:predefinedLocationReference> [1]
   ?
   <loc:_locationByReferenceExtension> com:_ExtensionType </loc:_locationByReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LocationByReference">
   <xs:complexContent>
      <xs:extension base="loc:Location">
         <xs:sequence>
            <xs:element name="predefinedLocationReference" type="loc:_PredefinedLocationVersionedReference"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_locationByReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LocationGroup

| | |
|---|---|
| *Super-types:* | LocationReference < **LocationGroup** (by extension) |
| *Sub-types:* | • LocationGroupByList (by extension)<br>• LocationGroupByReference (by extension) |

| | |
|---|---|
| **Name** | LocationGroup |
| **Abstract** | yes |
| **Documentation** | Multiple (i.e. more than one) physically separate locations which have no specific order. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:_locationGroupExtension> com:_ExtensionType </loc:_locationGroupExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LocationGroup" abstract="true">
   <xs:complexContent>
      <xs:extension base="loc:LocationReference">
         <xs:sequence>
            <xs:element name="_locationGroupExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LocationGroupByList

| | |
|---|---|
| *Super-types:* | LocationReference < LocationGroup (by extension) < **LocationGroupByList** (by extension) |

| | |
|---|---|
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LocationGroupByList |
| **Abstract** | no |
| **Documentation** | A group of (i.e. more than one) physically separate locations which have no specific order and where each location is explicitly listed. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:_locationGroupExtension> com:_ExtensionType </loc:_locationGroupExtension> [0..1]
   <loc:locationContainedInGroup> loc:Location </loc:locationContainedInGroup> [2..*] ?
   <loc:_locationGroupByListExtension> com:_ExtensionType </loc:_locationGroupByListExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LocationGroupByList">
   <xs:complexContent>
      <xs:extension base="loc:LocationGroup">
         <xs:sequence>
            <xs:element name="locationContainedInGroup" type="loc:Location" minOccurs="2" maxOccurs="unbounded"/>
            <xs:element name="_locationGroupByListExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LocationGroupByReference

| | |
|---|---|
| *Super-types:* | LocationReference < LocationGroup (by extension) < **LocationGroupByReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | LocationGroupByReference |
| **Abstract** | no |
| **Documentation** | A group of (i.e. more than one) physically separate locations which have no specific order that are defined by reference to a predefined non ordered location group. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:_locationGroupExtension> com:_ExtensionType </loc:_locationGroupExtension> [0..1]
   <loc:predefinedLocationGroupReference> loc:_PredefinedLocationGroupVersionedReference
   </loc:predefinedLocationGroupReference> [1] ?
   <loc:_locationGroupByReferenceExtension> com:_ExtensionType </loc:_locationGroupByReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LocationGroupByReference">
   <xs:complexContent>
      <xs:extension base="loc:LocationGroup">
         <xs:sequence>
            <xs:element name="predefinedLocationGroupReference" type="loc:_PredefinedLocationGroupVersionedReference"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_locationGroupByReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: LocationReference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • Itinerary (by extension)<br>  ◦ ItineraryByIndexedLocations (by extension)<br>  ◦ ItineraryByReference (by extension)<br>• Location (by extension)<br>  ◦ AreaLocation (by extension)<br>  ◦ LocationByReference (by extension)<br>  ◦ NetworkLocation (by extension)<br>  ▪ LinearLocation (by extension)<br>  ▪ SingleRoadLinearLocation (by extension)<br>  ▪ PointLocation (by extension)<br>• LocationGroup (by extension)<br>  ◦ LocationGroupByList (by extension)<br>  ◦ LocationGroupByReference (by extension) |

| | |
|---|---|
| **Name** | LocationReference |
| **Abstract** | yes |
| **Documentation** | Represents one or more physically separate locations. Multiple locations may be related, as in an itinerary or route, or may be unrelated. One LocationReference should not use multiple Location objects to represent the same physical location. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="LocationReference" abstract="true">
   <xs:sequence>
      <xs:element name="_locationReferenceExtension" type="loc:_LocationReferenceExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: NamedArea

| | |
|---|---|
| *Super-types:* | NamedArea < **NamedArea** (by extension) |
| *Sub-types:* | • IsoNamedArea (by extension)<br>• NamedArea (by extension)<br>• NutsNamedArea (by extension) |

| | |
|---|---|
| **Name** | NamedArea |
| **Abstract** | no |
| **Documentation** | An area defined by a name and/or in terms of known boundaries, such as country or county boundaries or allocated control area of particular authority. The attributes do not form a union; instead, the smallest intersection forms the resulting area. |

**XML Instance Representation**

```
<...>
   <!-- 'com:NamedArea' super type was not found in this schema. Some elements and attributes may be missing. -->
   <loc:areaName> com:MultilingualString </loc:areaName> [1] ?
   <loc:namedAreaType> loc:_NamedAreaTypeEnum </loc:namedAreaType> [0..1] ?
   <loc:country> com:CountryCode </loc:country> [0..1] ?
   <loc:_namedAreaExtension> loc:_NamedAreaExtensionType </loc:_namedAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="NamedArea">
   <xs:complexContent>
      <xs:extension base="com:NamedArea">
         <xs:sequence>
            <xs:element name="areaName" type="com:MultilingualString" minOccurs="1" maxOccurs="1"/>
            <xs:element name="namedAreaType" type="loc:_NamedAreaTypeEnum" minOccurs="0" maxOccurs="1"/>
            <xs:element name="country" type="com:CountryCode" minOccurs="0" maxOccurs="1"/>
            <xs:element name="_namedAreaExtension" type="loc:_NamedAreaExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: NetworkLocation

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < **NetworkLocation** (by extension) |
| *Sub-types:* | • LinearLocation (by extension)<br>  ◦ SingleRoadLinearLocation (by extension)<br>• PointLocation (by extension) |

| | |
|---|---|
| **Name** | NetworkLocation |
| **Abstract** | yes |
| **Documentation** | The specification of a location on a network (as a point or a linear location). |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:supplementaryPositionalDescription> loc:SupplementaryPositionalDescription
   </loc:supplementaryPositionalDescription> [0..1]
   <loc:destination> loc:Destination </loc:destination> [0..1]
   <loc:_networkLocationExtension> com:_ExtensionType </loc:_networkLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="NetworkLocation" abstract="true">
   <xs:complexContent>
      <xs:extension base="loc:Location">
         <xs:sequence>
            <xs:element name="supplementaryPositionalDescription" type="loc:SupplementaryPositionalDescription"
            minOccurs="0"/>
            <xs:element name="destination" type="loc:Destination" minOccurs="0"/>
            <xs:element name="_networkLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: NutsNamedArea

| | |
|---|---|
| *Super-types:* | NamedArea < NamedArea (by extension) < **NutsNamedArea** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | NutsNamedArea |
| **Abstract** | no |
| **Documentation** | The NUTS-Code representation for the named area (Nomenclature of territorial units for statistics) or its LAU code representation (Local Administrative Unit). |

**XML Instance Representation**

```
<...>
   <!-- 'com:NamedArea' super type was not found in this schema. Some elements and attributes may be missing. -->
   <loc:areaName> com:MultilingualString </loc:areaName> [1] ?
   <loc:namedAreaType> loc:_NamedAreaTypeEnum </loc:namedAreaType> [0..1] ?
   <loc:country> com:CountryCode </loc:country> [0..1] ?
   <loc:_namedAreaExtension> loc:_NamedAreaExtensionType </loc:_namedAreaExtension> [0..1]
   <loc:nutsCodeType> loc:_NutsCodeTypeEnum </loc:nutsCodeType> [1] ?
   <loc:nutsCode> loc:NutsCode </loc:nutsCode> [1] ?
   <loc:_nutsNamedAreaExtension> com:_ExtensionType </loc:_nutsNamedAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="NutsNamedArea">
   <xs:complexContent>
      <xs:extension base="loc:NamedArea">
         <xs:sequence>
            <xs:element name="nutsCodeType" type="loc:_NutsCodeTypeEnum" minOccurs="1" maxOccurs="1"/>
            <xs:element name="nutsCode" type="loc:NutsCode" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_nutsNamedAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OffsetDistance

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OffsetDistance |
| **Abstract** | no |
| **Documentation** | The non-negative offset distance from the ALERT-C referenced point to the actual point. |

**XML Instance Representation**

```
<...>
   <loc:offsetDistance> com:MetresAsNonNegativeInteger </loc:offsetDistance> [1] ?
   <loc:_offsetDistanceExtension> com:_ExtensionType </loc:_offsetDistanceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OffsetDistance">
   <xs:sequence>
      <xs:element name="offsetDistance" type="com:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_offsetDistanceExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrAreaLocationReference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • OpenlrCircleLocationReference (by extension)<br>• OpenlrClosedLineLocationReference (by extension)<br>• OpenlrGridLocationReference (by extension)<br>• OpenlrPolygonLocationReference (by extension)<br>• OpenlrRectangleLocationReference (by extension) |

| | |
|---|---|
| **Name** | OpenlrAreaLocationReference |
| **Abstract** | yes |
| **Documentation** | 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 |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrAreaLocationReference" abstract="true">
   <xs:sequence>
      <xs:element name="_openlrAreaLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrBasePointLocation

| | |
|---|---|
| *Super-types:* | OpenlrPointLocationReference < **OpenlrBasePointLocation** (by extension) |
| *Sub-types:* | • OpenlrPointAlongLine (by extension)<br>• OpenlrPoiWithAccessPoint (by extension) |

| | |
|---|---|
| **Name** | OpenlrBasePointLocation |
| **Abstract** | yes |
| **Documentation** | Holds common data that are used both in OpenlrPointAccessPoint and OpenlrPointAlongLine. |

**XML Instance Representation**

```
<...>
   <loc:_openlrPointLocationReferenceExtension> com:_ExtensionType </loc:_openlrPointLocationReferenceExtension>
   [0..1]
   <loc:openlrSideOfRoad> loc:_OpenlrSideOfRoadEnum </loc:openlrSideOfRoad> [1] ?
   <loc:openlrOrientation> loc:_OpenlrOrientationEnum </loc:openlrOrientation> [1] ?
   <loc:openlrLocationReferencePoint> loc:OpenlrLocationReferencePoint </loc:openlrLocationReferencePoint> [1] ?
   <loc:openlrLastLocationReferencePoint> loc:OpenlrLastLocationReferencePoint
   </loc:openlrLastLocationReferencePoint> [1] ?
   <loc:openlrOffsets> loc:OpenlrOffsets </loc:openlrOffsets> [0..1] ?
   <loc:_openlrBasePointLocationExtension> com:_ExtensionType </loc:_openlrBasePointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrBasePointLocation" abstract="true">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrPointLocationReference">
         <xs:sequence>
            <xs:element name="openlrSideOfRoad" type="loc:_OpenlrSideOfRoadEnum" minOccurs="1" maxOccurs="1"/>
            <xs:element name="openlrOrientation" type="loc:_OpenlrOrientationEnum" minOccurs="1" maxOccurs="1"/>
            <xs:element name="openlrLocationReferencePoint" type="loc:OpenlrLocationReferencePoint"/>
            <xs:element name="openlrLastLocationReferencePoint" type="loc:OpenlrLastLocationReferencePoint"/>
            <xs:element name="openlrOffsets" type="loc:OpenlrOffsets" minOccurs="0"/>
            <xs:element name="_openlrBasePointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrBaseReferencePoint

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • OpenlrLastLocationReferencePoint (by extension)<br>• OpenlrLocationReferencePoint (by extension) |

| | |
|---|---|
| **Name** | OpenlrBaseReferencePoint |
| **Abstract** | yes |
| **Documentation** | Base class used to hold data about a reference point. |

**XML Instance Representation**

```
<...>
   <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [1] ?
   <loc:openlrLineAttributes> loc:OpenlrLineAttributes </loc:openlrLineAttributes> [1] ?
   <loc:_openlrBaseReferencePointExtension> com:_ExtensionType </loc:_openlrBaseReferencePointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrBaseReferencePoint" abstract="true">
   <xs:sequence>
      <xs:element name="openlrCoordinates" type="loc:PointCoordinates"/>
      <xs:element name="openlrLineAttributes" type="loc:OpenlrLineAttributes"/>
      <xs:element name="_openlrBaseReferencePointExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrCircleLocationReference

| | |
|---|---|
| *Super-types:* | OpenlrAreaLocationReference < **OpenlrCircleLocationReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrCircleLocationReference |
| **Abstract** | no |
| **Documentation** | The OpenLR method of area definition by providing a center position and a radius |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
   <loc:openlrRadius> com:MetresAsNonNegativeInteger </loc:openlrRadius> [1] ?
   <loc:openlrGeoCoordinate> loc:OpenlrGeoCoordinate </loc:openlrGeoCoordinate> [1]
   <loc:_openlrCircleLocationReferenceExtension> com:_ExtensionType </loc:_openlrCircleLocationReferenceExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrCircleLocationReference">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrAreaLocationReference">
         <xs:sequence>
            <xs:element name="openlrRadius" type="com:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1"/>
            <xs:element name="openlrGeoCoordinate" type="loc:OpenlrGeoCoordinate"/>
            <xs:element name="_openlrCircleLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrClosedLineLocationReference

| | |
|---|---|
| *Super-types:* | OpenlrAreaLocationReference < **OpenlrClosedLineLocationReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrClosedLineLocationReference |
| **Abstract** | no |
| **Documentation** | The OpenLR method of area definition by providing a closed path (i.e. a circuit) in the road network. The boundary always consists of road segments |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
   <loc:openlrLocationReferencePoint> loc:OpenlrLocationReferencePoint </loc:openlrLocationReferencePoint> [1..*]
   <loc:openlrLastLine> loc:OpenlrLastLocationReferencePoint </loc:openlrLastLine> [1] ?
   <loc:_openlrClosedLineLocationReferenceExtension> com:_ExtensionType
   </loc:_openlrClosedLineLocationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrClosedLineLocationReference">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrAreaLocationReference">
         <xs:sequence>
            <xs:element name="openlrLocationReferencePoint" type="loc:OpenlrLocationReferencePoint"
            maxOccurs="unbounded"/>
            <xs:element name="openlrLastLine" type="loc:OpenlrLastLocationReferencePoint"/>
            <xs:element name="_openlrClosedLineLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrGeoCoordinate

| | |
|---|---|
| *Super-types:* | OpenlrPointLocationReference < **OpenlrGeoCoordinate** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrGeoCoordinate |
| **Abstract** | no |
| **Documentation** | A geo-coordinate pair is a position in a map defined by its longitude and latitude coordinate values. |

**XML Instance Representation**

```
<...>
   <loc:_openlrPointLocationReferenceExtension> com:_ExtensionType </loc:_openlrPointLocationReferenceExtension>
   [0..1]
   <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [1] ?
   <loc:_openlrGeoCoordinateExtension> com:_ExtensionType </loc:_openlrGeoCoordinateExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrGeoCoordinate">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrPointLocationReference">
         <xs:sequence>
            <xs:element name="openlrCoordinates" type="loc:PointCoordinates"/>
            <xs:element name="_openlrGeoCoordinateExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrGridLocationReference

| | |
|---|---|
| *Super-types:* | OpenlrAreaLocationReference < **OpenlrGridLocationReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrGridLocationReference |
| **Abstract** | no |
| **Documentation** | Area defined using an OpenLR™ method consisting in defining it by a tessellation of rectangles |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
   <loc:openlrNumColumns> com:NonNegativeInteger </loc:openlrNumColumns> [1] ?
   <loc:openlrNumRows> com:NonNegativeInteger </loc:openlrNumRows> [1] ?
   <loc:openlrRectangle> loc:OpenlrRectangle </loc:openlrRectangle> [1]
   <loc:_openlrGridLocationReferenceExtension> com:_ExtensionType </loc:_openlrGridLocationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrGridLocationReference">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrAreaLocationReference">
         <xs:sequence>
            <xs:element name="openlrNumColumns" type="com:NonNegativeInteger" minOccurs="1" maxOccurs="1"/>
            <xs:element name="openlrNumRows" type="com:NonNegativeInteger" minOccurs="1" maxOccurs="1"/>
            <xs:element name="openlrRectangle" type="loc:OpenlrRectangle"/>
            <xs:element name="_openlrGridLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrLastLocationReferencePoint

| | |
|---|---|
| *Super-types:* | OpenlrBaseReferencePoint < **OpenlrLastLocationReferencePoint** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrLastLocationReferencePoint |
| **Abstract** | no |
| **Documentation** | The sequence of location reference points is terminated by a last location reference point. |

**XML Instance Representation**

```
<...>
   <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [1] ?
   <loc:openlrLineAttributes> loc:OpenlrLineAttributes </loc:openlrLineAttributes> [1] ?
   <loc:_openlrBaseReferencePointExtension> com:_ExtensionType </loc:_openlrBaseReferencePointExtension> [0..1]
   <loc:_openlrLastLocationReferencePointExtension> com:_ExtensionType
   </loc:_openlrLastLocationReferencePointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrLastLocationReferencePoint">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrBaseReferencePoint">
         <xs:sequence>
            <xs:element name="_openlrLastLocationReferencePointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrLineAttributes

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrLineAttributes |
| **Abstract** | no |
| **Documentation** | Line attributes are part of a location reference point and consists of functional road class (FRC),form of way (FOW) and bearing (BEAR) data. |

**XML Instance Representation**

```
<...>
   <loc:openlrFunctionalRoadClass> loc:_OpenlrFunctionalRoadClassEnum </loc:openlrFunctionalRoadClass> [1] ?
   <loc:openlrFormOfWay> loc:_OpenlrFormOfWayEnum </loc:openlrFormOfWay> [1] ?
   <loc:openlrBearing> com:AngleInDegrees </loc:openlrBearing> [1] ?
   <loc:_openlrLineAttributesExtension> com:_ExtensionType </loc:_openlrLineAttributesExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrLineAttributes">
   <xs:sequence>
```

```
    <xs:element name="openlrFunctionalRoadClass" type="loc:_OpenlrFunctionalRoadClassEnum" minOccurs="1"
    maxOccurs="1"/>
    <xs:element name="openlrFormOfWay" type="loc:_OpenlrFormOfWayEnum" minOccurs="1" maxOccurs="1"/>
    <xs:element name="openlrBearing" type="com:AngleInDegrees" minOccurs="1" maxOccurs="1"/>
    <xs:element name="_openlrLineAttributesExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrLineLocationReference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrLineLocationReference |
| **Abstract** | no |
| **Documentation** | A line location reference is defined by an ordered sequence of location reference points and a terminating last location reference point. |

**XML Instance Representation**

```
<...>
  <loc:openlrLocationReferencePoint> loc:OpenlrLocationReferencePoint </loc:openlrLocationReferencePoint> [1..*]
  <loc:openlrLastLocationReferencePoint> loc:OpenlrLastLocationReferencePoint
  </loc:openlrLastLocationReferencePoint> [1]
  <loc:openlrOffsets> loc:OpenlrOffsets </loc:openlrOffsets> [0..1] ?
  <loc:_openlrLineLocationReferenceExtension> com:_ExtensionType </loc:_openlrLineLocationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrLineLocationReference">
  <xs:sequence>
    <xs:element name="openlrLocationReferencePoint" type="loc:OpenlrLocationReferencePoint" maxOccurs="unbounded"/>
    <xs:element name="openlrLastLocationReferencePoint" type="loc:OpenlrLastLocationReferencePoint"/>
    <xs:element name="openlrOffsets" type="loc:OpenlrOffsets" minOccurs="0"/>
    <xs:element name="_openlrLineLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrLinear

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrLinear |
| **Abstract** | no |
| **Documentation** | OpenLR line location reference |

**XML Instance Representation**

```
<...>
  <loc:firstDirection> loc:OpenlrLineLocationReference </loc:firstDirection> [1] ?
  <loc:oppositeDirection> loc:OpenlrLineLocationReference </loc:oppositeDirection> [0..1] ?
  <loc:_openlrLinearExtension> com:_ExtensionType </loc:_openlrLinearExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrLinear">
  <xs:sequence>
    <xs:element name="firstDirection" type="loc:OpenlrLineLocationReference"/>
    <xs:element name="oppositeDirection" type="loc:OpenlrLineLocationReference" minOccurs="0"/>
    <xs:element name="_openlrLinearExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrLocationReferencePoint

| | |
|---|---|
| *Super-types:* | OpenlrBaseReferencePoint < **OpenlrLocationReferencePoint** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrLocationReferencePoint |
| **Abstract** | no |
| **Documentation** | The basis of a location reference is a sequence of location reference points (LRPs). |

**XML Instance Representation**

```
<...>
  <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [1] ?
  <loc:openlrLineAttributes> loc:OpenlrLineAttributes </loc:openlrLineAttributes> [1] ?
  <loc:_openlrBaseReferencePointExtension> com:_ExtensionType </loc:_openlrBaseReferencePointExtension> [0..1]
  <loc:openlrPathAttributes> loc:OpenlrPathAttributes </loc:openlrPathAttributes> [1] ?
  <loc:_openlrLocationReferencePointExtension> com:_ExtensionType </loc:_openlrLocationReferencePointExtension>
  [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrLocationReferencePoint">
  <xs:complexContent>
    <xs:extension base="loc:OpenlrBaseReferencePoint">
      <xs:sequence>
        <xs:element name="openlrPathAttributes" type="loc:OpenlrPathAttributes"/>
        <xs:element name="_openlrLocationReferencePointExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrOffsets

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrOffsets |
| **Abstract** | no |
| **Documentation** | Offsets are used to locate the start and end of a location more precisely than bounding to the nodes in a network. |

**XML Instance Representation**

```
<...>
  <loc:openlrPositiveOffset> com:MetresAsNonNegativeInteger </loc:openlrPositiveOffset> [0..1] ?
  <loc:openlrNegativeOffset> com:MetresAsNonNegativeInteger </loc:openlrNegativeOffset> [0..1] ?
  <loc:_openlrOffsetsExtension> com:_ExtensionType </loc:_openlrOffsetsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrOffsets">
  <xs:sequence>
    <xs:element name="openlrPositiveOffset" type="com:MetresAsNonNegativeInteger" minOccurs="0" maxOccurs="1"/>
    <xs:element name="openlrNegativeOffset" type="com:MetresAsNonNegativeInteger" minOccurs="0" maxOccurs="1"/>
    <xs:element name="_openlrOffsetsExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrPathAttributes

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrPathAttributes |
| **Abstract** | no |
| **Documentation** | Properties of the path from the associated location reference point to the next location reference point, which are specified to assist correct identification of the point in an external map data source. |

**XML Instance Representation**

```
<...>
  <loc:openlrLowestFrcToNextLRPoint> loc:_OpenlrFunctionalRoadClassEnum </loc:openlrLowestFrcToNextLRPoint> [1] ?
  <loc:openlrDistanceToNextLRPoint> com:NonNegativeInteger </loc:openlrDistanceToNextLRPoint> [1] ?
  <loc:_openlrPathAttributesExtension> com:_ExtensionType </loc:_openlrPathAttributesExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPathAttributes">
  <xs:sequence>
    <xs:element name="openlrLowestFrcToNextLRPoint" type="loc:_OpenlrFunctionalRoadClassEnum" minOccurs="1"
    maxOccurs="1"/>
    <xs:element name="openlrDistanceToNextLRPoint" type="com:NonNegativeInteger" minOccurs="1" maxOccurs="1"/>
    <xs:element name="_openlrPathAttributesExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrPoiWithAccessPoint

| | |
|---|---|
| *Super-types:* | OpenlrPointLocationReference < OpenlrBasePointLocation (by extension) < **OpenlrPoiWithAccessPoint** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrPoiWithAccessPoint |
| **Abstract** | no |
| **Documentation** | A point of interest (POI) along a line with access is a point location which is defined by a linear reference path, an offset value (defining the access point) from the starting node of this path and a coordinate pair that defines the POI itself. |

**XML Instance Representation**

```
<...>
```

```
   <loc:_openlrPointLocationReferenceExtension> com:_ExtensionType </loc:_openlrPointLocationReferenceExtension>
   [0..1]
   <loc:openlrSideOfRoad> loc:_OpenlrSideOfRoadEnum </loc:openlrSideOfRoad> [1] ?
   <loc:openlrOrientation> loc:_OpenlrOrientationEnum </loc:openlrOrientation> [1] ?
   <loc:openlrLocationReferencePoint> loc:OpenlrLocationReferencePoint </loc:openlrLocationReferencePoint> [1] ?
   <loc:openlrLastLocationReferencePoint> loc:OpenlrLastLocationReferencePoint
   </loc:openlrLastLocationReferencePoint> [1] ?
   <loc:openlrOffsets> loc:OpenlrOffsets </loc:openlrOffsets> [0..1] ?
   <loc:_openlrBasePointLocationExtension> com:_ExtensionType </loc:_openlrBasePointLocationExtension> [0..1]
   <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [1] ?
   <loc:_openlrPoiWithAccessPointExtension> com:_ExtensionType </loc:_openlrPoiWithAccessPointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPoiWithAccessPoint">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrBasePointLocation">
         <xs:sequence>
            <xs:element name="openlrCoordinates" type="loc:PointCoordinates"/>
            <xs:element name="_openlrPoiWithAccessPointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrPointAlongLine

| | |
|---|---|
| *Super-types:* | OpenlrPointLocationReference < OpenlrBasePointLocation (by extension) < **OpenlrPointAlongLine** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrPointAlongLine |
| **Abstract** | no |
| **Documentation** | Point along a line |

**XML Instance Representation**

```
<...>
   <loc:_openlrPointLocationReferenceExtension> com:_ExtensionType </loc:_openlrPointLocationReferenceExtension>
   [0..1]
   <loc:openlrSideOfRoad> loc:_OpenlrSideOfRoadEnum </loc:openlrSideOfRoad> [1] ?
   <loc:openlrOrientation> loc:_OpenlrOrientationEnum </loc:openlrOrientation> [1] ?
   <loc:openlrLocationReferencePoint> loc:OpenlrLocationReferencePoint </loc:openlrLocationReferencePoint> [1] ?
   <loc:openlrLastLocationReferencePoint> loc:OpenlrLastLocationReferencePoint
   </loc:openlrLastLocationReferencePoint> [1] ?
   <loc:openlrOffsets> loc:OpenlrOffsets </loc:openlrOffsets> [0..1] ?
   <loc:_openlrBasePointLocationExtension> com:_ExtensionType </loc:_openlrBasePointLocationExtension> [0..1]
   <loc:_openlrPointAlongLineExtension> com:_ExtensionType </loc:_openlrPointAlongLineExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPointAlongLine">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrBasePointLocation">
         <xs:sequence>
            <xs:element name="_openlrPointAlongLineExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrPointLocationReference

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • OpenlrBasePointLocation (by extension)<br>  ◦ OpenlrPointAlongLine (by extension)<br>  ◦ OpenlrPoiWithAccessPoint (by extension)<br>• OpenlrGeoCoordinate (by extension) |

| | |
|---|---|
| **Name** | OpenlrPointLocationReference |
| **Abstract** | yes |
| **Documentation** | A point location is a zero-dimensional element in a map that specifies a geometric location. |

**XML Instance Representation**

```
<...>
   <loc:_openlrPointLocationReferenceExtension> com:_ExtensionType </loc:_openlrPointLocationReferenceExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPointLocationReference" abstract="true">
   <xs:sequence>
      <xs:element name="_openlrPointLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrPolygonCorners

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrPolygonCorners |
| **Abstract** | no |
| **Documentation** | A geodetic coordinate Tuple that defines the vertices of the underlying geometrical polygon. |

**XML Instance Representation**

```
<...>
   <loc:openlrCoordinates> loc:PointCoordinates </loc:openlrCoordinates> [3..*] ?
   <loc:_openlrPolygonCornersExtension> com:_ExtensionType </loc:_openlrPolygonCornersExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPolygonCorners">
   <xs:sequence>
      <xs:element name="openlrCoordinates" type="loc:PointCoordinates" minOccurs="3" maxOccurs="unbounded"/>
      <xs:element name="_openlrPolygonCornersExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrPolygonLocationReference

| | |
|---|---|
| *Super-types:* | OpenlrAreaLocationReference < **OpenlrPolygonLocationReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrPolygonLocationReference |
| **Abstract** | no |
| **Documentation** | The OpenLR method of area definition by providing points that bound the area |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
   <loc:openlrPolygonCorners> loc:OpenlrPolygonCorners </loc:openlrPolygonCorners> [1]
   <loc:_openlrPolygonLocationReferenceExtension> com:_ExtensionType </loc:_openlrPolygonLocationReferenceExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrPolygonLocationReference">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrAreaLocationReference">
         <xs:sequence>
            <xs:element name="openlrPolygonCorners" type="loc:OpenlrPolygonCorners"/>
            <xs:element name="_openlrPolygonLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: OpenlrRectangle

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrRectangle |
| **Abstract** | no |
| **Documentation** | Area delimited by a rectangle defined by the geodetic co-ordinates of the two ends of its diagonal from south-west to north-east (the rectangle having two sides that are parallel to lines of latitude) |

**XML Instance Representation**

```
<...>
   <loc:openlrLowerLeft> loc:PointCoordinates </loc:openlrLowerLeft> [1] ?
   <loc:openlrUpperRight> loc:PointCoordinates </loc:openlrUpperRight> [1] ?
   <loc:_openlrRectangleExtension> com:_ExtensionType </loc:_openlrRectangleExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrRectangle">
   <xs:sequence>
      <xs:element name="openlrLowerLeft" type="loc:PointCoordinates"/>
      <xs:element name="openlrUpperRight" type="loc:PointCoordinates"/>
      <xs:element name="_openlrRectangleExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: OpenlrRectangleLocationReference

| | |
|---|---|
| *Super-types:* | OpenlrAreaLocationReference < **OpenlrRectangleLocationReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | OpenlrRectangleLocationReference |
| **Abstract** | no |
| **Documentation** | The openLR method of area definition by providing a rectangular shape defined by two geo-coordinate pairs |

**XML Instance Representation**

```
<...>
   <loc:_openlrAreaLocationReferenceExtension> com:_ExtensionType </loc:_openlrAreaLocationReferenceExtension> [0..1]
   <loc:openlrRectangle> loc:OpenlrRectangle </loc:openlrRectangle> [1]
   <loc:_openlrRectangleLocationReferenceExtension> com:_ExtensionType
   </loc:_openlrRectangleLocationReferenceExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="OpenlrRectangleLocationReference">
   <xs:complexContent>
      <xs:extension base="loc:OpenlrAreaLocationReference">
         <xs:sequence>
            <xs:element name="openlrRectangle" type="loc:OpenlrRectangle"/>
            <xs:element name="_openlrRectangleLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

---

## Complex Type: PercentageDistanceAlongLinearElement

| | |
|---|---|
| *Super-types:* | DistanceAlongLinearElement < **PercentageDistanceAlongLinearElement** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PercentageDistanceAlongLinearElement |
| **Abstract** | no |
| **Documentation** | 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. |

**XML Instance Representation**

```
<...>
   <loc:_distanceAlongLinearElementExtension> com:_ExtensionType </loc:_distanceAlongLinearElementExtension> [0..1]
   <loc:percentageDistanceAlong> com:Percentage </loc:percentageDistanceAlong> [1] ?
   <loc:_percentageDistanceAlongLinearElementExtension> com:_ExtensionType
   </loc:_percentageDistanceAlongLinearElementExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PercentageDistanceAlongLinearElement">
   <xs:complexContent>
      <xs:extension base="loc:DistanceAlongLinearElement">
         <xs:sequence>
            <xs:element name="percentageDistanceAlong" type="com:Percentage" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_percentageDistanceAlongLinearElementExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

---

## Complex Type: PointAlongLinearElement

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PointAlongLinearElement |
| **Abstract** | no |
| **Documentation** | 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 EN ISO 19148 definitions. |

**XML Instance Representation**

```
<...>
   <loc:administrativeAreaOfPoint> com:MultilingualString </loc:administrativeAreaOfPoint> [0..1] ?
   <loc:directionAtPoint> loc:_DirectionEnum </loc:directionAtPoint> [0..1] ?
   <loc:directionRelativeAtPoint> loc:_LinearDirectionEnum </loc:directionRelativeAtPoint> [0..1] ?
   <loc:heightGradeOfPoint> loc:_HeightGradeEnum </loc:heightGradeOfPoint> [0..1] ?
   <loc:linearElement> loc:LinearElement </loc:linearElement> [1]
   <loc:distanceAlongLinearElement> loc:DistanceAlongLinearElement </loc:distanceAlongLinearElement> [1]
   <loc:_pointAlongLinearElementExtension> com:_ExtensionType </loc:_pointAlongLinearElementExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PointAlongLinearElement">
   <xs:sequence>
      <xs:element name="administrativeAreaOfPoint" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="directionAtPoint" type="loc:_DirectionEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="directionRelativeAtPoint" type="loc:_LinearDirectionEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="heightGradeOfPoint" type="loc:_HeightGradeEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="linearElement" type="loc:LinearElement"/>
      <xs:element name="distanceAlongLinearElement" type="loc:DistanceAlongLinearElement"/>
      <xs:element name="_pointAlongLinearElementExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PointByCoordinates

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PointByCoordinates |
| **Abstract** | no |
| **Documentation** | A single point defined only by a coordinate set with an optional bearing direction. |

**XML Instance Representation**

```
<...>
   <loc:bearing> com:AngleInDegrees </loc:bearing> [0..1] ?
   <loc:pointCoordinates> loc:PointCoordinates </loc:pointCoordinates> [1]
   <loc:_pointByCoordinatesExtension> com:_ExtensionType </loc:_pointByCoordinatesExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PointByCoordinates">
   <xs:sequence>
      <xs:element name="bearing" type="com:AngleInDegrees" minOccurs="0" maxOccurs="1"/>
      <xs:element name="pointCoordinates" type="loc:PointCoordinates"/>
      <xs:element name="_pointByCoordinatesExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PointCoordinates

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PointCoordinates |
| **Abstract** | no |
| **Documentation** | A pair of planar coordinates defining the geodetic position of a single point using the European Terrestrial Reference System 1989 (ETRS89). |

**XML Instance Representation**

```
<...>
   <loc:latitude> com:Float </loc:latitude> [1] ?
   <loc:longitude> com:Float </loc:longitude> [1] ?
   <loc:heightCoordinate> loc:HeightCoordinate </loc:heightCoordinate> [0..3]
   <loc:positionConfidenceEllipse> loc:PositionConfidenceEllipse </loc:positionConfidenceEllipse> [0..1]
   <loc:horizontalPositionAccuracy> loc:PositionAccuracy </loc:horizontalPositionAccuracy> [0..1] ?
   <loc:_pointCoordinatesExtension> com:_ExtensionType </loc:_pointCoordinatesExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PointCoordinates">
   <xs:sequence>
      <xs:element name="latitude" type="com:Float" minOccurs="1" maxOccurs="1"/>
      <xs:element name="longitude" type="com:Float" minOccurs="1" maxOccurs="1"/>
      <xs:element name="heightCoordinate" type="loc:HeightCoordinate" minOccurs="0" maxOccurs="3"/>
      <xs:element name="positionConfidenceEllipse" type="loc:PositionConfidenceEllipse" minOccurs="0"/>
      <xs:element name="horizontalPositionAccuracy" type="loc:PositionAccuracy" minOccurs="0"/>
      <xs:element name="_pointCoordinatesExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PointDestination

| | |
|---|---|
| *Super-types:* | Destination < **PointDestination** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PointDestination |
| **Abstract** | no |
| **Documentation** | The specification of the destination of a defined route or itinerary which is a point. |

**XML Instance Representation**

```
<...>
```

```
   <loc:_destinationExtension> com:_ExtensionType </loc:_destinationExtension> [0..1]
   <loc:pointLocation> loc:PointLocation </loc:pointLocation> [1]
   <loc:_pointDestinationExtension> com:_ExtensionType </loc:_pointDestinationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PointDestination">
   <xs:complexContent>
      <xs:extension base="loc:Destination">
         <xs:sequence>
            <xs:element name="pointLocation" type="loc:PointLocation"/>
            <xs:element name="_pointDestinationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: PointLocation

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < NetworkLocation (by extension) < **PointLocation** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PointLocation |
| **Abstract** | no |
| **Documentation** | Location representing a single geospatial point. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:supplementaryPositionalDescription> loc:SupplementaryPositionalDescription
   </loc:supplementaryPositionalDescription> [0..1]
   <loc:destination> loc:Destination </loc:destination> [0..1]
   <loc:_networkLocationExtension> com:_ExtensionType </loc:_networkLocationExtension> [0..1]
   <loc:pointByCoordinates> loc:PointByCoordinates </loc:pointByCoordinates> [0..1]
   <loc:pointAlongLinearElement> loc:PointAlongLinearElement </loc:pointAlongLinearElement> [0..*]
   <loc:alertCPoint> loc:AlertCPoint </loc:alertCPoint> [0..*] ?
   <loc:tpegPointLocation> loc:TpegPointLocation </loc:tpegPointLocation> [0..1]
   <loc:openlrPointLocationReference> loc:OpenlrPointLocationReference </loc:openlrPointLocationReference> [0..1]
   <loc:_pointLocationExtension> com:_ExtensionType </loc:_pointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PointLocation">
   <xs:complexContent>
      <xs:extension base="loc:NetworkLocation">
         <xs:sequence>
            <xs:element name="pointByCoordinates" type="loc:PointByCoordinates" minOccurs="0"/>
            <xs:element name="pointAlongLinearElement" type="loc:PointAlongLinearElement" minOccurs="0"
            maxOccurs="unbounded"/>
            <xs:element name="alertCPoint" type="loc:AlertCPoint" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="tpegPointLocation" type="loc:TpegPointLocation" minOccurs="0"/>
            <xs:element name="openlrPointLocationReference" type="loc:OpenlrPointLocationReference" minOccurs="0"/>
            <xs:element name="_pointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: PositionAccuracy

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PositionAccuracy |
| **Abstract** | no |
| **Documentation** | Horizontal position accuracy parameters defined according to EN 16803-1 |

**XML Instance Representation**

```
<...>
   <loc:accuracyPercentile50> com:MetresAsFloat </loc:accuracyPercentile50> [0..1] ?
   <loc:accuracyPercentile75> com:MetresAsFloat </loc:accuracyPercentile75> [0..1] ?
   <loc:accuracyPercentile95> com:MetresAsFloat </loc:accuracyPercentile95> [0..1] ?
   <loc:_positionAccuracyExtension> com:_ExtensionType </loc:_positionAccuracyExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PositionAccuracy">
   <xs:sequence>
      <xs:element name="accuracyPercentile50" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="accuracyPercentile75" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="accuracyPercentile95" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_positionAccuracyExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
```

```
</xs:complexType>
```

top

## Complex Type: PositionConfidenceEllipse

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PositionConfidenceEllipse |
| **Abstract** | no |
| **Documentation** | Confidence ellipse position defined in a shape of ellipse with a predefined confidence level (e.g. 95 %). The centre of the ellipse shape corresponds to the reference position point for which the position accuracy is evaluated. |

**XML Instance Representation**

```
<...>
   <loc:semiMajorAxisLength> com:MetresAsFloat </loc:semiMajorAxisLength> [0..1] ?
   <loc:semiMajorAxisLengthCodedError> loc:_PositionConfidenceCodedErrorEnum </loc:semiMajorAxisLengthCodedError>
   [0..1] ?
   <loc:semiMinorAxisLength> com:MetresAsFloat </loc:semiMinorAxisLength> [0..1] ?
   <loc:semiMinorAxisLengthCodedError> loc:_PositionConfidenceCodedErrorEnum </loc:semiMinorAxisLengthCodedError>
   [0..1] ?
   <loc:semiMajorAxisOrientation> com:AngleInDegrees </loc:semiMajorAxisOrientation> [0..1] ?
   <loc:semiMajorAxisOrientationError> com:Boolean </loc:semiMajorAxisOrientationError> [0..1] ?
   <loc:_positionConfidenceEllipseExtension> com:_ExtensionType </loc:_positionConfidenceEllipseExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PositionConfidenceEllipse">
   <xs:sequence>
      <xs:element name="semiMajorAxisLength" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="semiMajorAxisLengthCodedError" type="loc:_PositionConfidenceCodedErrorEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="semiMinorAxisLength" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="semiMinorAxisLengthCodedError" type="loc:_PositionConfidenceCodedErrorEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="semiMajorAxisOrientation" type="com:AngleInDegrees" minOccurs="0" maxOccurs="1"/>
      <xs:element name="semiMajorAxisOrientationError" type="com:Boolean" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_positionConfidenceEllipseExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: Referent

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | Referent |
| **Abstract** | no |
| **Documentation** | A referent on a linear object that has a known location such as a node, a reference marker (e.g. a marker-post), an intersection etc. |

**XML Instance Representation**

```
<...>
   <loc:referentIdentifier> com:String </loc:referentIdentifier> [1] ?
   <loc:referentName> com:String </loc:referentName> [0..1] ?
   <loc:referentType> loc:_ReferentTypeEnum </loc:referentType> [1] ?
   <loc:referentDescription> com:MultilingualString </loc:referentDescription> [0..1] ?
   <loc:pointCoordinates> loc:PointCoordinates </loc:pointCoordinates> [0..1]
   <loc:_referentExtension> com:_ExtensionType </loc:_referentExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="Referent">
   <xs:sequence>
      <xs:element name="referentIdentifier" type="com:String" minOccurs="1" maxOccurs="1"/>
      <xs:element name="referentName" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="referentType" type="loc:_ReferentTypeEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="referentDescription" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="pointCoordinates" type="loc:PointCoordinates" minOccurs="0"/>
      <xs:element name="_referentExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: RoadInformation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | RoadInformation |
| **Abstract** | no |
| **Documentation** | Information on a road |

**XML Instance Representation**

```
<...>
   <loc:roadDestination> com:String </loc:roadDestination> [0..1] ?
   <loc:roadName> com:String </loc:roadName> [0..1] ?
   <loc:roadNumber> com:String </loc:roadNumber> [0..1] ?
   <loc:_roadInformationExtension> com:_ExtensionType </loc:_roadInformationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="RoadInformation">
   <xs:sequence>
      <xs:element name="roadDestination" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="roadName" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="roadNumber" type="com:String" minOccurs="0" maxOccurs="1"/>
      <xs:element name="_roadInformationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SingleRoadLinearLocation

| | |
|---|---|
| *Super-types:* | LocationReference < Location (by extension) < NetworkLocation (by extension) < LinearLocation (by extension) < **SingleRoadLinearLocation** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SingleRoadLinearLocation |
| **Abstract** | no |
| **Documentation** | Location representing a linear section along a single road with optional directionality defined between two points on the same road. No matter the kind of linear reference it uses, the constraint of using only a single road must be preserved. |

**XML Instance Representation**

```
<...>
   <loc:_locationReferenceExtension> loc:_LocationReferenceExtensionType </loc:_locationReferenceExtension> [0..1]
   <loc:externalReferencing> loc:ExternalReferencing </loc:externalReferencing> [0..*]
   <loc:coordinatesForDisplay> loc:PointCoordinates </loc:coordinatesForDisplay> [0..1] ?
   <loc:_locationExtension> com:_ExtensionType </loc:_locationExtension> [0..1]
   <loc:supplementaryPositionalDescription> loc:SupplementaryPositionalDescription
   </loc:supplementaryPositionalDescription> [0..1]
   <loc:destination> loc:Destination </loc:destination> [0..1]
   <loc:_networkLocationExtension> com:_ExtensionType </loc:_networkLocationExtension> [0..1]
   <loc:openlrLinear> loc:OpenlrLinear </loc:openlrLinear> [0..1]
   <loc:gmlLineString> loc:GmlLineString </loc:gmlLineString> [0..1]
   <loc:_linearLocationExtension> com:_ExtensionType </loc:_linearLocationExtension> [0..1]
   <loc:tpegLinearLocation> loc:TpegLinearLocation </loc:tpegLinearLocation> [0..1]
   <loc:alertCLinear> loc:AlertCLinear </loc:alertCLinear> [0..*] ?
   <loc:linearWithinLinearElement> loc:LinearWithinLinearElement </loc:linearWithinLinearElement> [0..*]
   <loc:_singleRoadLinearLocationExtension> com:_ExtensionType </loc:_singleRoadLinearLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SingleRoadLinearLocation">
   <xs:complexContent>
      <xs:extension base="loc:LinearLocation">
         <xs:sequence>
            <xs:element name="tpegLinearLocation" type="loc:TpegLinearLocation" minOccurs="0"/>
            <xs:element name="alertCLinear" type="loc:AlertCLinear" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="linearWithinLinearElement" type="loc:LinearWithinLinearElement" minOccurs="0"
            maxOccurs="unbounded"/>
            <xs:element name="_singleRoadLinearLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: SupplementaryPositionalDescription

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SupplementaryPositionalDescription |
| **Abstract** | no |
| **Documentation** | A collection of supplementary positional information which improves the precision of the location. |

**XML Instance Representation**

```
<...
 locationPrecision="com:MetresAsNonNegativeInteger [0..1] ?">
   <loc:directionPurpose> loc:_DirectionPurposeEnum </loc:directionPurpose> [0..1] ?
   <loc:geographicDescriptor> loc:_GeographicCharacteristicEnum </loc:geographicDescriptor> [0..1] ?
   <loc:infrastructureDescriptor> loc:_InfrastructureDescriptorEnum </loc:infrastructureDescriptor> [0..1] ?
   <loc:lengthAffected> com:MetresAsFloat </loc:lengthAffected> [0..1] ?
   <loc:locationDescription> com:MultilingualString </loc:locationDescription> [0..1] ?
   <loc:positionOnCarriageway> loc:_RelativePositionOnCarriagewayEnum </loc:positionOnCarriageway> [0..1] ?
   <loc:sequentialRampNumber> com:NonNegativeInteger </loc:sequentialRampNumber> [0..1] ?
   <loc:carriageway> loc:Carriageway </loc:carriageway> [0..*]
   <loc:namedArea> loc:NamedArea </loc:namedArea> [0..1]
```

```
   <loc:roadInformation> loc:RoadInformation </loc:roadInformation> [0..*] ?
   <loc:_supplementaryPositionalDescriptionExtension> loc:_SupplementaryPositionalDescriptionExtensionType
   </loc:_supplementaryPositionalDescriptionExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SupplementaryPositionalDescription">
   <xs:sequence>
      <xs:element name="directionPurpose" type="loc:_DirectionPurposeEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="geographicDescriptor" type="loc:_GeographicCharacteristicEnum" minOccurs="0" maxOccurs="1"/>
      <xs:element name="infrastructureDescriptor" type="loc:_InfrastructureDescriptorEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="lengthAffected" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="locationDescription" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
      <xs:element name="positionOnCarriageway" type="loc:_RelativePositionOnCarriagewayEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="sequentialRampNumber" type="com:NonNegativeInteger" minOccurs="0" maxOccurs="1"/>
      <xs:element name="carriageway" type="loc:Carriageway" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="namedArea" type="loc:NamedArea" minOccurs="0"/>
      <xs:element name="roadInformation" type="loc:RoadInformation" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="_supplementaryPositionalDescriptionExtension"
      type="loc:_SupplementaryPositionalDescriptionExtensionType" minOccurs="0"/>
   </xs:sequence>
   <xs:attribute name="locationPrecision" type="com:MetresAsNonNegativeInteger" use="optional"/>
</xs:complexType>
```

top

## Complex Type: TpegAreaDescriptor

| | |
|---|---|
| *Super-types:* | TpegDescriptor < **TpegAreaDescriptor** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegAreaDescriptor |
| **Abstract** | no |
| **Documentation** | A descriptor for describing an area location. |

**XML Instance Representation**

```
<...>
   <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
   <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
   <loc:tpegAreaDescriptorType> loc:_TpegLoc03AreaDescriptorSubtypeEnum </loc:tpegAreaDescriptorType> [1] ?
   <loc:_tpegAreaDescriptorExtension> com:_ExtensionType </loc:_tpegAreaDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegAreaDescriptor">
   <xs:complexContent>
      <xs:extension base="loc:TpegDescriptor">
         <xs:sequence>
            <xs:element name="tpegAreaDescriptorType" type="loc:_TpegLoc03AreaDescriptorSubtypeEnum" minOccurs="1"
            maxOccurs="1"/>
            <xs:element name="_tpegAreaDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegAreaLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • TpegGeometricArea (by extension)<br>• TpegNamedOnlyArea (by extension) |

| | |
|---|---|
| **Name** | TpegAreaLocation |
| **Abstract** | yes |
| **Documentation** | A geographic or geometric area defined by a TPEG-Loc structure which may include height information for additional geospatial discrimination. |

**XML Instance Representation**

```
<...>
   <loc:tpegAreaLocationType> loc:_TpegLoc01AreaLocationSubtypeEnum </loc:tpegAreaLocationType> [1] ?
   <loc:tpegHeight> loc:TpegHeight </loc:tpegHeight> [0..1]
   <loc:_tpegAreaLocationExtension> com:_ExtensionType </loc:_tpegAreaLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegAreaLocation" abstract="true">
   <xs:sequence>
      <xs:element name="tpegAreaLocationType" type="loc:_TpegLoc01AreaLocationSubtypeEnum" minOccurs="1"
      maxOccurs="1"/>
      <xs:element name="tpegHeight" type="loc:TpegHeight" minOccurs="0"/>
      <xs:element name="_tpegAreaLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegDescriptor

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | • TpegAreaDescriptor (by extension)<br>• TpegPointDescriptor (by extension)<br>  ◦ TpegIlcPointDescriptor (by extension)<br>  ◦ TpegJunctionPointDescriptor (by extension)<br>  ◦ TpegOtherPointDescriptor (by extension) |

| | |
|---|---|
| **Name** | TpegDescriptor |
| **Abstract** | yes |
| **Documentation** | A collection of information providing descriptive references to locations using the TPEG-Loc location referencing approach. |

**XML Instance Representation**

```
<...>
   <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
   <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegDescriptor" abstract="true">
   <xs:sequence>
      <xs:element name="descriptor" type="com:MultilingualString" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_tpegDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegFramedPoint

| | |
|---|---|
| *Super-types:* | TpegPointLocation < **TpegFramedPoint** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegFramedPoint |
| **Abstract** | no |
| **Documentation** | A point on the road network which is framed between two other points on the same road. |

**XML Instance Representation**

```
<...>
   <loc:tpegDirection> loc:_DirectionEnum </loc:tpegDirection> [1] ?
   <loc:_tpegPointLocationExtension> com:_ExtensionType </loc:_tpegPointLocationExtension> [0..1]
   <loc:tpegFramedPointLocationType> loc:_TpegLoc01FramedPointLocationSubtypeEnum </loc:tpegFramedPointLocationType>
   [1] ?
   <loc:framedPoint> loc:TpegNonJunctionPoint </loc:framedPoint> [1] ?
   <loc:to> loc:TpegPoint </loc:to> [1] ?
   <loc:from> loc:TpegPoint </loc:from> [1] ?
   <loc:_tpegFramedPointExtension> com:_ExtensionType </loc:_tpegFramedPointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegFramedPoint">
   <xs:complexContent>
      <xs:extension base="loc:TpegPointLocation">
         <xs:sequence>
            <xs:element name="tpegFramedPointLocationType" type="loc:_TpegLoc01FramedPointLocationSubtypeEnum"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="framedPoint" type="loc:TpegNonJunctionPoint"/>
            <xs:element name="to" type="loc:TpegPoint"/>
            <xs:element name="from" type="loc:TpegPoint"/>
            <xs:element name="_tpegFramedPointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegGeometricArea

| | |
|---|---|
| *Super-types:* | TpegAreaLocation < **TpegGeometricArea** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegGeometricArea |
| **Abstract** | no |
| **Documentation** | A geometric area defined by a centre point and a radius. |

**XML Instance Representation**

```
<...>
   <loc:tpegAreaLocationType> loc:_TpegLoc01AreaLocationSubtypeEnum </loc:tpegAreaLocationType> [1] ?
   <loc:tpegHeight> loc:TpegHeight </loc:tpegHeight> [0..1]
   <loc:_tpegAreaLocationExtension> com:_ExtensionType </loc:_tpegAreaLocationExtension> [0..1]
   <loc:radius> com:MetresAsNonNegativeInteger </loc:radius> [1] ?
   <loc:centrePoint> loc:PointCoordinates </loc:centrePoint> [1] ?
```

```
   <loc:name> loc:TpegAreaDescriptor </loc:name> [0..1] ?
   <loc:_tpegGeometricAreaExtension> com:_ExtensionType </loc:_tpegGeometricAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegGeometricArea">
   <xs:complexContent>
      <xs:extension base="loc:TpegAreaLocation">
         <xs:sequence>
            <xs:element name="radius" type="com:MetresAsNonNegativeInteger" minOccurs="1" maxOccurs="1"/>
            <xs:element name="centrePoint" type="loc:PointCoordinates"/>
            <xs:element name="name" type="loc:TpegAreaDescriptor" minOccurs="0"/>
            <xs:element name="_tpegGeometricAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegHeight

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegHeight |
| **Abstract** | no |
| **Documentation** | Height information which provides additional discrimination for the applicable area. |

**XML Instance Representation**

```
<...>
   <loc:height> com:MetresAsFloat </loc:height> [0..1] ?
   <loc:heightType> loc:_TpegLoc04HeightTypeEnum </loc:heightType> [1] ?
   <loc:_tpegHeightExtension> com:_ExtensionType </loc:_tpegHeightExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegHeight">
   <xs:sequence>
      <xs:element name="height" type="com:MetresAsFloat" minOccurs="0" maxOccurs="1"/>
      <xs:element name="heightType" type="loc:_TpegLoc04HeightTypeEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_tpegHeightExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegIlcPointDescriptor

| | |
|---|---|
| *Super-types:* | TpegDescriptor < TpegPointDescriptor (by extension) < **TpegIlcPointDescriptor** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegIlcPointDescriptor |
| **Abstract** | no |
| **Documentation** | A descriptor for describing a junction by defining the intersecting roads. |

**XML Instance Representation**

```
<...>
   <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
   <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
   <loc:_tpegPointDescriptorExtension> com:_ExtensionType </loc:_tpegPointDescriptorExtension> [0..1]
   <loc:tpegIlcPointDescriptorType> loc:_TpegLoc03IlcPointDescriptorSubtypeEnum </loc:tpegIlcPointDescriptorType> [1]
   ?
   <loc:_tpegIlcPointDescriptorExtension> com:_ExtensionType </loc:_tpegIlcPointDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegIlcPointDescriptor">
   <xs:complexContent>
      <xs:extension base="loc:TpegPointDescriptor">
         <xs:sequence>
            <xs:element name="tpegIlcPointDescriptorType" type="loc:_TpegLoc03IlcPointDescriptorSubtypeEnum"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_tpegIlcPointDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegJunction

| | |
|---|---|
| *Super-types:* | TpegPoint < **TpegJunction** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegJunction |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | A point on the road network which is a road junction point. |

**XML Instance Representation**

```
<...>
   <loc:_tpegPointExtension> com:_ExtensionType </loc:_tpegPointExtension> [0..1]
   <loc:pointCoordinates> loc:PointCoordinates </loc:pointCoordinates> [1]
   <loc:name> loc:TpegJunctionPointDescriptor </loc:name> [0..1] ?
   <loc:ilc> loc:TpegIlcPointDescriptor </loc:ilc> [1..3] ?
   <loc:otherName> loc:TpegOtherPointDescriptor </loc:otherName> [0..*] ?
   <loc:_tpegJunctionExtension> com:_ExtensionType </loc:_tpegJunctionExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegJunction">
   <xs:complexContent>
      <xs:extension base="loc:TpegPoint">
         <xs:sequence>
            <xs:element name="pointCoordinates" type="loc:PointCoordinates"/>
            <xs:element name="name" type="loc:TpegJunctionPointDescriptor" minOccurs="0"/>
            <xs:element name="ilc" type="loc:TpegIlcPointDescriptor" maxOccurs="3"/>
            <xs:element name="otherName" type="loc:TpegOtherPointDescriptor" minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="_tpegJunctionExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegJunctionPointDescriptor

| | |
|---|---|
| *Super-types:* | TpegDescriptor < TpegPointDescriptor (by extension) < **TpegJunctionPointDescriptor** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegJunctionPointDescriptor |
| **Abstract** | no |
| **Documentation** | A descriptor for describing a point at a junction on a road network. |

**XML Instance Representation**

```
<...>
   <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
   <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
   <loc:_tpegPointDescriptorExtension> com:_ExtensionType </loc:_tpegPointDescriptorExtension> [0..1]
   <loc:tpegJunctionPointDescriptorType> loc:_TpegLoc03JunctionPointDescriptorSubtypeEnum
   </loc:tpegJunctionPointDescriptorType> [1] ?
   <loc:_tpegJunctionPointDescriptorExtension> com:_ExtensionType </loc:_tpegJunctionPointDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegJunctionPointDescriptor">
   <xs:complexContent>
      <xs:extension base="loc:TpegPointDescriptor">
         <xs:sequence>
            <xs:element name="tpegJunctionPointDescriptorType" type="loc:_TpegLoc03JunctionPointDescriptorSubtypeEnum"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_tpegJunctionPointDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegLinearLocation

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegLinearLocation |
| **Abstract** | no |
| **Documentation** | A linear section along a single road defined between two points on the same road by a TPEG-Loc structure. |

**XML Instance Representation**

```
<...>
   <loc:tpegDirection> loc:_DirectionEnum </loc:tpegDirection> [1] ?
   <loc:tpegLinearLocationType> loc:_TpegLoc01LinearLocationSubtypeEnum </loc:tpegLinearLocationType> [1] ?
   <loc:to> loc:TpegPoint </loc:to> [1] ?
   <loc:from> loc:TpegPoint </loc:from> [1] ?
   <loc:_tpegLinearLocationExtension> com:_ExtensionType </loc:_tpegLinearLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegLinearLocation">
   <xs:sequence>
      <xs:element name="tpegDirection" type="loc:_DirectionEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="tpegLinearLocationType" type="loc:_TpegLoc01LinearLocationSubtypeEnum" minOccurs="1"
      maxOccurs="1"/>
```

```
    <xs:element name="to" type="loc:TpegPoint"/>
    <xs:element name="from" type="loc:TpegPoint"/>
    <xs:element name="_tpegLinearLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegNamedOnlyArea

| | |
|---|---|
| *Super-types:* | TpegAreaLocation < **TpegNamedOnlyArea** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegNamedOnlyArea |
| **Abstract** | no |
| **Documentation** | An area defined by a well-known name. |

**XML Instance Representation**

```
<...>
  <loc:tpegAreaLocationType> loc:_TpegLoc01AreaLocationSubtypeEnum </loc:tpegAreaLocationType> [1] ?
  <loc:tpegHeight> loc:TpegHeight </loc:tpegHeight> [0..1]
  <loc:_tpegAreaLocationExtension> com:_ExtensionType </loc:_tpegAreaLocationExtension> [0..1]
  <loc:name> loc:TpegAreaDescriptor </loc:name> [1..*] ?
  <loc:_tpegNamedOnlyAreaExtension> com:_ExtensionType </loc:_tpegNamedOnlyAreaExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegNamedOnlyArea">
  <xs:complexContent>
    <xs:extension base="loc:TpegAreaLocation">
      <xs:sequence>
        <xs:element name="name" type="loc:TpegAreaDescriptor" maxOccurs="unbounded"/>
        <xs:element name="_tpegNamedOnlyAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegNonJunctionPoint

| | |
|---|---|
| *Super-types:* | TpegPoint < **TpegNonJunctionPoint** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegNonJunctionPoint |
| **Abstract** | no |
| **Documentation** | A point on the road network which is not a road junction point. |

**XML Instance Representation**

```
<...>
  <loc:_tpegPointExtension> com:_ExtensionType </loc:_tpegPointExtension> [0..1]
  <loc:pointCoordinates> loc:PointCoordinates </loc:pointCoordinates> [1]
  <loc:name> loc:TpegOtherPointDescriptor </loc:name> [1..*] ?
  <loc:_tpegNonJunctionPointExtension> com:_ExtensionType </loc:_tpegNonJunctionPointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegNonJunctionPoint">
  <xs:complexContent>
    <xs:extension base="loc:TpegPoint">
      <xs:sequence>
        <xs:element name="pointCoordinates" type="loc:PointCoordinates"/>
        <xs:element name="name" type="loc:TpegOtherPointDescriptor" maxOccurs="unbounded"/>
        <xs:element name="_tpegNonJunctionPointExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegOtherPointDescriptor

| | |
|---|---|
| *Super-types:* | TpegDescriptor < TpegPointDescriptor (by extension) < **TpegOtherPointDescriptor** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TpegOtherPointDescriptor |
| **Abstract** | no |
| **Documentation** | General descriptor for describing a point. |

**XML Instance Representation**

```
<...>
  <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
  <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
  <loc:_tpegPointDescriptorExtension> com:_ExtensionType </loc:_tpegPointDescriptorExtension> [0..1]
```

```
<loc:tpegOtherPointDescriptorType> loc:_TpegLoc03OtherPointDescriptorSubtypeEnum
</loc:tpegOtherPointDescriptorType> [1] ?
<loc:_tpegOtherPointDescriptorExtension> com:_ExtensionType </loc:_tpegOtherPointDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegOtherPointDescriptor">
  <xs:complexContent>
    <xs:extension base="loc:TpegPointDescriptor">
      <xs:sequence>
        <xs:element name="tpegOtherPointDescriptorType" type="loc:_TpegLoc03OtherPointDescriptorSubtypeEnum"
        minOccurs="1" maxOccurs="1"/>
        <xs:element name="_tpegOtherPointDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegPoint

*Super-types:* None

*Sub-types:*

- TpegJunction (by extension)
- TpegNonJunctionPoint (by extension)

| | |
|---|---|
| **Name** | TpegPoint |
| **Abstract** | yes |
| **Documentation** | A point on the road network which is either a junction point or a non junction point. |

**XML Instance Representation**

```
<...>
  <loc:_tpegPointExtension> com:_ExtensionType </loc:_tpegPointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegPoint" abstract="true">
  <xs:sequence>
    <xs:element name="_tpegPointExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegPointDescriptor

*Super-types:* TpegDescriptor < **TpegPointDescriptor** (by extension)

*Sub-types:*

- TpegIlcPointDescriptor (by extension)
- TpegJunctionPointDescriptor (by extension)
- TpegOtherPointDescriptor (by extension)

| | |
|---|---|
| **Name** | TpegPointDescriptor |
| **Abstract** | yes |
| **Documentation** | A descriptor for describing a point location. |

**XML Instance Representation**

```
<...>
  <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
  <loc:_tpegDescriptorExtension> com:_ExtensionType </loc:_tpegDescriptorExtension> [0..1]
  <loc:_tpegPointDescriptorExtension> com:_ExtensionType </loc:_tpegPointDescriptorExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegPointDescriptor" abstract="true">
  <xs:complexContent>
    <xs:extension base="loc:TpegDescriptor">
      <xs:sequence>
        <xs:element name="_tpegPointDescriptorExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TpegPointLocation

*Super-types:* None

*Sub-types:*

- TpegFramedPoint (by extension)
- TpegSimplePoint (by extension)

| | |
|---|---|
| **Name** | TpegPointLocation |
| **Abstract** | yes |

**Documentation** A single point on the road network defined by a TPEG-Loc structure and which has an associated direction of traffic flow.

**XML Instance Representation**

```
<...>
   <loc:tpegDirection> loc:_DirectionEnum </loc:tpegDirection> [1] ?
   <loc:_tpegPointLocationExtension> com:_ExtensionType </loc:_tpegPointLocationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegPointLocation" abstract="true">
   <xs:sequence>
      <xs:element name="tpegDirection" type="loc:_DirectionEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="_tpegPointLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TpegSimplePoint

| | |
|---|---|
| *Super-types:* | TpegPointLocation < **TpegSimplePoint** (by extension) |
| *Sub-types:* | None |

**Name** TpegSimplePoint

**Abstract** no

**Documentation** A point on the road network which is not bounded by any other points on the road network.

**XML Instance Representation**

```
<...>
   <loc:tpegDirection> loc:_DirectionEnum </loc:tpegDirection> [1] ?
   <loc:_tpegPointLocationExtension> com:_ExtensionType </loc:_tpegPointLocationExtension> [0..1]
   <loc:tpegSimplePointLocationType> loc:_TpegLoc01SimplePointLocationSubtypeEnum </loc:tpegSimplePointLocationType>
   [1] ?
   <loc:point> loc:TpegPoint </loc:point> [1] ?
   <loc:_tpegSimplePointExtension> com:_ExtensionType </loc:_tpegSimplePointExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TpegSimplePoint">
   <xs:complexContent>
      <xs:extension base="loc:TpegPointLocation">
         <xs:sequence>
            <xs:element name="tpegSimplePointLocationType" type="loc:_TpegLoc01SimplePointLocationSubtypeEnum"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="point" type="loc:TpegPoint"/>
            <xs:element name="_tpegSimplePointExtension" type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _AlertCDirectionEnum

| | |
|---|---|
| *Super-types:* | xs:string < AlertCDirectionEnum (by restriction) < **_AlertCDirectionEnum** (by extension) |
| *Sub-types:* | None |

**Name** _AlertCDirectionEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:AlertCDirectionEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_AlertCDirectionEnum">
   <xs:simpleContent>
      <xs:extension base="loc:AlertCDirectionEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _AltitudeAccuracyEnum

| | |
|---|---|
| *Super-types:* | xs:string < AltitudeAccuracyEnum (by restriction) < **_AltitudeAccuracyEnum** (by extension) |
| *Sub-types:* | None |

**Name** _AltitudeAccuracyEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:AltitudeAccuracyEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_AltitudeAccuracyEnum">
  <xs:simpleContent>
    <xs:extension base="loc:AltitudeAccuracyEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _AreaPlacesEnum

| | |
|---|---|
| *Super-types:* | xs:string < AreaPlacesEnum (by restriction) < **_AreaPlacesEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _AreaPlacesEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:AreaPlacesEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_AreaPlacesEnum">
  <xs:simpleContent>
    <xs:extension base="loc:AreaPlacesEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _CarriagewayEnum

| | |
|---|---|
| *Super-types:* | xs:string < CarriagewayEnum (by restriction) < **_CarriagewayEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _CarriagewayEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:CarriagewayEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_CarriagewayEnum">
  <xs:simpleContent>
    <xs:extension base="loc:CarriagewayEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _DirectionEnum

| | |
|---|---|
| *Super-types:* | xs:string < DirectionEnum (by restriction) < **_DirectionEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _DirectionEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:DirectionEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_DirectionEnum">
  <xs:simpleContent>
    <xs:extension base="loc:DirectionEnum">
```

```
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _DirectionPurposeEnum

| | |
|---|---|
| *Super-types:* | xs:string < DirectionPurposeEnum (by restriction) < **_DirectionPurposeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _DirectionPurposeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:DirectionPurposeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_DirectionPurposeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:DirectionPurposeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _GeographicCharacteristicEnum

| | |
|---|---|
| *Super-types:* | xs:string < GeographicCharacteristicEnum (by restriction) < **_GeographicCharacteristicEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _GeographicCharacteristicEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:GeographicCharacteristicEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_GeographicCharacteristicEnum">
  <xs:simpleContent>
    <xs:extension base="loc:GeographicCharacteristicEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _HeightGradeEnum

| | |
|---|---|
| *Super-types:* | xs:string < HeightGradeEnum (by restriction) < **_HeightGradeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _HeightGradeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:HeightGradeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_HeightGradeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:HeightGradeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _HeightTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < HeightTypeEnum (by restriction) < **_HeightTypeEnum** (by extension) |

| | |
|---|---|
| *Sub-types:* | None |

**Name** _HeightTypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:HeightTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_HeightTypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:HeightTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _InfrastructureDescriptorEnum

| | |
|---|---|
| *Super-types:* | xs:string < InfrastructureDescriptorEnum (by restriction) < **_InfrastructureDescriptorEnum** (by extension) |
| *Sub-types:* | None |

**Name** _InfrastructureDescriptorEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:InfrastructureDescriptorEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_InfrastructureDescriptorEnum">
   <xs:simpleContent>
      <xs:extension base="loc:InfrastructureDescriptorEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _IntermediatePointOnLinearElement

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

**Name** _IntermediatePointOnLinearElement

**Abstract** no

**XML Instance Representation**

```
<...
 index="xs:int [1]">
   <loc:referent> loc:Referent </loc:referent> [1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_IntermediatePointOnLinearElement">
   <xs:sequence>
      <xs:element name="referent" type="loc:Referent" minOccurs="1" maxOccurs="1"/>
   </xs:sequence>
   <xs:attribute name="index" type="xs:int" use="required"/>
</xs:complexType>
```

top

## Complex Type: _LaneEnum

| | |
|---|---|
| *Super-types:* | xs:string < LaneEnum (by restriction) < **_LaneEnum** (by extension) |
| *Sub-types:* | None |

**Name** _LaneEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:LaneEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_LaneEnum">
  <xs:simpleContent>
    <xs:extension base="loc:LaneEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _LinearDirectionEnum

| | |
|---|---|
| *Super-types:* | xs:string < LinearDirectionEnum (by restriction) < **_LinearDirectionEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _LinearDirectionEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:LinearDirectionEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_LinearDirectionEnum">
  <xs:simpleContent>
    <xs:extension base="loc:LinearDirectionEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _LinearElementNatureEnum

| | |
|---|---|
| *Super-types:* | xs:string < LinearElementNatureEnum (by restriction) < **_LinearElementNatureEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _LinearElementNatureEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:LinearElementNatureEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_LinearElementNatureEnum">
  <xs:simpleContent>
    <xs:extension base="loc:LinearElementNatureEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _LocationContainedInItinerary

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _LocationContainedInItinerary |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 index="xs:int [1]">
  <loc:location> loc:Location </loc:location> [1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_LocationContainedInItinerary">
  <xs:sequence>
    <xs:element name="location" type="loc:Location" minOccurs="1" maxOccurs="1"/>
  </xs:sequence>
  <xs:attribute name="index" type="xs:int" use="required"/>
</xs:complexType>
```

top

### Complex Type: _LocationReferenceExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _LocationReferenceExtensionType |
| **Abstract** | no |

**XML Instance Representation**

```
<...>
   <loc:facilityLocation> locx:FacilityLocation </loc:facilityLocation> [0..1]
   Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_LocationReferenceExtensionType">
   <xs:sequence>
      <xs:element name="facilityLocation" type="locx:FacilityLocation" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

---

### Complex Type: _NamedAreaExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _NamedAreaExtensionType |
| **Abstract** | no |

**XML Instance Representation**

```
<...>
   <loc:namedAreaExtended> locx:NamedAreaExtended </loc:namedAreaExtended> [0..1]
   Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_NamedAreaExtensionType">
   <xs:sequence>
      <xs:element name="namedAreaExtended" type="locx:NamedAreaExtended" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
   </xs:sequence>
</xs:complexType>
```

top

---

### Complex Type: _NamedAreaTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < NamedAreaTypeEnum (by restriction) < **_NamedAreaTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _NamedAreaTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:NamedAreaTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_NamedAreaTypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:NamedAreaTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

---

### Complex Type: _NutsCodeTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < NutsCodeTypeEnum (by restriction) < **_NutsCodeTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _NutsCodeTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:NutsCodeTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_NutsCodeTypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:NutsCodeTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _OpenlrFormOfWayEnum

| | |
|---|---|
| *Super-types:* | xs:string < OpenlrFormOfWayEnum (by restriction) < **_OpenlrFormOfWayEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _OpenlrFormOfWayEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:OpenlrFormOfWayEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_OpenlrFormOfWayEnum">
   <xs:simpleContent>
      <xs:extension base="loc:OpenlrFormOfWayEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _OpenlrFunctionalRoadClassEnum

| | |
|---|---|
| *Super-types:* | xs:string < OpenlrFunctionalRoadClassEnum (by restriction) < **_OpenlrFunctionalRoadClassEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _OpenlrFunctionalRoadClassEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:OpenlrFunctionalRoadClassEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_OpenlrFunctionalRoadClassEnum">
   <xs:simpleContent>
      <xs:extension base="loc:OpenlrFunctionalRoadClassEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _OpenlrOrientationEnum

| | |
|---|---|
| *Super-types:* | xs:string < OpenlrOrientationEnum (by restriction) < **_OpenlrOrientationEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _OpenlrOrientationEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:OpenlrOrientationEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_OpenlrOrientationEnum">
   <xs:simpleContent>
      <xs:extension base="loc:OpenlrOrientationEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
```

```
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

### Complex Type: _OpenlrSideOfRoadEnum

| | |
|---|---|
| *Super-types:* | xs:string < OpenlrSideOfRoadEnum (by restriction) < **_OpenlrSideOfRoadEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _OpenlrSideOfRoadEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:OpenlrSideOfRoadEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_OpenlrSideOfRoadEnum">
  <xs:simpleContent>
    <xs:extension base="loc:OpenlrSideOfRoadEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

### Complex Type: _PositionConfidenceCodedErrorEnum

| | |
|---|---|
| *Super-types:* | xs:string < PositionConfidenceCodedErrorEnum (by restriction) < **_PositionConfidenceCodedErrorEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _PositionConfidenceCodedErrorEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:PositionConfidenceCodedErrorEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PositionConfidenceCodedErrorEnum">
  <xs:simpleContent>
    <xs:extension base="loc:PositionConfidenceCodedErrorEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

### Complex Type: _PredefinedItineraryVersionedReference

| | |
|---|---|
| *Super-types:* | com:VersionedReference < **_PredefinedItineraryVersionedReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _PredefinedItineraryVersionedReference |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 targetClass="loc:PredefinedItinerary [1]">
  <!-- 'com:VersionedReference' super type was not found in this schema. Some elements and attributes may be
  missing. -->
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PredefinedItineraryVersionedReference">
  <xs:complexContent>
    <xs:extension base="com:VersionedReference">
      <xs:attribute name="targetClass" type="xs:string" use="required" fixed="loc:PredefinedItinerary"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

top

### Complex Type: _PredefinedLocationGroupVersionedReference

| | |
|---|---|
| *Super-types:* | com:VersionedReference < **_PredefinedLocationGroupVersionedReference** (by extension) |

| | |
|---|---|
| *Sub-types:* | None |

**Name** _PredefinedLocationGroupVersionedReference

**Abstract** no

**XML Instance Representation**

```
<...
 targetClass="loc:PredefinedLocationGroup [1]">
   <!-- 'com:VersionedReference' super type was not found in this schema. Some elements and attributes may be
   missing. -->
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PredefinedLocationGroupVersionedReference">
   <xs:complexContent>
      <xs:extension base="com:VersionedReference">
         <xs:attribute name="targetClass" type="xs:string" use="required" fixed="loc:PredefinedLocationGroup"/>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _PredefinedLocationVersionedReference

| | |
|---|---|
| *Super-types:* | com:VersionedReference < **_PredefinedLocationVersionedReference** (by extension) |
| *Sub-types:* | None |

**Name** _PredefinedLocationVersionedReference

**Abstract** no

**XML Instance Representation**

```
<...
 targetClass="loc:PredefinedLocation [1]">
   <!-- 'com:VersionedReference' super type was not found in this schema. Some elements and attributes may be
   missing. -->
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_PredefinedLocationVersionedReference">
   <xs:complexContent>
      <xs:extension base="com:VersionedReference">
         <xs:attribute name="targetClass" type="xs:string" use="required" fixed="loc:PredefinedLocation"/>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _ReferentTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < ReferentTypeEnum (by restriction) < **_ReferentTypeEnum** (by extension) |
| *Sub-types:* | None |

**Name** _ReferentTypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   loc:ReferentTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_ReferentTypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:ReferentTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _RelativePositionOnCarriagewayEnum

| | |
|---|---|
| *Super-types:* | xs:string < RelativePositionOnCarriagewayEnum (by restriction) < **_RelativePositionOnCarriagewayEnum** (by extension) |
| *Sub-types:* | None |

**Name** _RelativePositionOnCarriagewayEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
```

```
  loc:RelativePositionOnCarriagewayEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_RelativePositionOnCarriagewayEnum">
  <xs:simpleContent>
    <xs:extension base="loc:RelativePositionOnCarriagewayEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _SubdivisionTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < SubdivisionTypeEnum (by restriction) < **_SubdivisionTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _SubdivisionTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:SubdivisionTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_SubdivisionTypeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:SubdivisionTypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _SupplementaryPositionalDescriptionExtensionType

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _SupplementaryPositionalDescriptionExtensionType |
| **Abstract** | no |

**XML Instance Representation**

```
<...>
  <loc:supplementaryPositionalDescriptionExtended> locx:SupplementaryPositionalDescriptionExtended
  </loc:supplementaryPositionalDescriptionExtended> [0..1]
  Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_SupplementaryPositionalDescriptionExtensionType">
  <xs:sequence>
    <xs:element name="supplementaryPositionalDescriptionExtended"
    type="locx:SupplementaryPositionalDescriptionExtended" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>
```

top

## Complex Type: _TpegLoc01AreaLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc01AreaLocationSubtypeEnum (by restriction) < **_TpegLoc01AreaLocationSubtypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _TpegLoc01AreaLocationSubtypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc01AreaLocationSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc01AreaLocationSubtypeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:TpegLoc01AreaLocationSubtypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
```

```
</xs:complexType>
```

top

## Complex Type: _TpegLoc01FramedPointLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc01FramedPointLocationSubtypeEnum (by restriction) < **_TpegLoc01FramedPointLocationSubtypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _TpegLoc01FramedPointLocationSubtypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc01FramedPointLocationSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc01FramedPointLocationSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc01FramedPointLocationSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc01LinearLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc01LinearLocationSubtypeEnum (by restriction) < **_TpegLoc01LinearLocationSubtypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _TpegLoc01LinearLocationSubtypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc01LinearLocationSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc01LinearLocationSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc01LinearLocationSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc01SimplePointLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc01SimplePointLocationSubtypeEnum (by restriction) < **_TpegLoc01SimplePointLocationSubtypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _TpegLoc01SimplePointLocationSubtypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc01SimplePointLocationSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc01SimplePointLocationSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc01SimplePointLocationSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc03AreaDescriptorSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc03AreaDescriptorSubtypeEnum (by restriction) < **_TpegLoc03AreaDescriptorSubtypeEnum** (by |

extension)

*Sub-types:* None

**Name** _TpegLoc03AreaDescriptorSubtypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc03AreaDescriptorSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc03AreaDescriptorSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc03AreaDescriptorSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc03IlcPointDescriptorSubtypeEnum

*Super-types:* xs:string < TpegLoc03IlcPointDescriptorSubtypeEnum (by restriction) < **_TpegLoc03IlcPointDescriptorSubtypeEnum** (by extension)

*Sub-types:* None

**Name** _TpegLoc03IlcPointDescriptorSubtypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc03IlcPointDescriptorSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc03IlcPointDescriptorSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc03IlcPointDescriptorSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc03JunctionPointDescriptorSubtypeEnum

*Super-types:* xs:string < TpegLoc03JunctionPointDescriptorSubtypeEnum (by restriction) < **_TpegLoc03JunctionPointDescriptorSubtypeEnum** (by extension)

*Sub-types:* None

**Name** _TpegLoc03JunctionPointDescriptorSubtypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc03JunctionPointDescriptorSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc03JunctionPointDescriptorSubtypeEnum">
   <xs:simpleContent>
      <xs:extension base="loc:TpegLoc03JunctionPointDescriptorSubtypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc03OtherPointDescriptorSubtypeEnum

*Super-types:* xs:string < TpegLoc03OtherPointDescriptorSubtypeEnum (by restriction) < **_TpegLoc03OtherPointDescriptorSubtypeEnum** (by extension)

*Sub-types:* None

**Name** _TpegLoc03OtherPointDescriptorSubtypeEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc03OtherPointDescriptorSubtypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc03OtherPointDescriptorSubtypeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:TpegLoc03OtherPointDescriptorSubtypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _TpegLoc04HeightTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < TpegLoc04HeightTypeEnum (by restriction) < **_TpegLoc04HeightTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _TpegLoc04HeightTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
  loc:TpegLoc04HeightTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TpegLoc04HeightTypeEnum">
  <xs:simpleContent>
    <xs:extension base="loc:TpegLoc04HeightTypeEnum">
      <xs:attribute name="_extendedValue" type="xs:string"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

top

## Simple Type: AlertCDirectionEnum

| | |
|---|---|
| *Super-types:* | xs:string < **AlertCDirectionEnum** (by restriction) |
| *Sub-types:* | • _AlertCDirectionEnum (by extension) |

| | |
|---|---|
| **Name** | AlertCDirectionEnum |
| **Content** | • Base XSD Type: string<br>• *value* comes from list: {'negative'\|'positive'\|'_extended'} |
| **Documentation** | Direction used to reach the primary location from the secondary location in ALERT-C location table, as defined in CEN ISO 14819-1 |

**Schema Component Representation**

```
<xs:simpleType name="AlertCDirectionEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="negative"/>
    <xs:enumeration value="positive"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: AlertCLocationCode

| | |
|---|---|
| *Super-types:* | com:NonNegativeInteger < **AlertCLocationCode** (by restriction) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AlertCLocationCode |
| **Content** | • **'NonNegativeInteger' super type was not found in this schema. Its facets could not be printed out.**<br>• 1 <= *value* <= 63487 |
| **Documentation** | A positive integer number (between 1 and 63 487) which uniquely identifies a pre-defined Alert C location defined within an Alert-C table. |

**Schema Component Representation**

```
<xs:simpleType name="AlertCLocationCode">
  <xs:restriction base="com:NonNegativeInteger">
    <xs:minInclusive value="1"/>
    <xs:maxInclusive value="63487"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: AltitudeAccuracyEnum

| | |
|---|---|
| *Super-types:* | xs:string < **AltitudeAccuracyEnum** (by restriction) |
| *Sub-types:* | • _AltitudeAccuracyEnum (by extension) |

**Name** AltitudeAccuracyEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'equalToOrLessThan1Centimetre'|'equalToOrLessThan2Centimetres'|'equalToOrLessThan5Centimetres'|'equalToOrLessThan10Centimetres'|'equal

**Documentation** Coded level of vertical accuracy

**Schema Component Representation**

```
<xs:simpleType name="AltitudeAccuracyEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="equalToOrLessThan1Centimetre"/>
    <xs:enumeration value="equalToOrLessThan2Centimetres"/>
    <xs:enumeration value="equalToOrLessThan5Centimetres"/>
    <xs:enumeration value="equalToOrLessThan10Centimetres"/>
    <xs:enumeration value="equalToOrLessThan20Centimetres"/>
    <xs:enumeration value="equalToOrLessThan50Centimetres"/>
    <xs:enumeration value="equalToOrLessThan1Metre"/>
    <xs:enumeration value="equalToOrLessThan2Metres"/>
    <xs:enumeration value="equalToOrLessThan5Metres"/>
    <xs:enumeration value="equalToOrLessThan10Metres"/>
    <xs:enumeration value="equalToOrLessThan20Metres"/>
    <xs:enumeration value="equalToOrLessThan50Metres"/>
    <xs:enumeration value="equalToOrLessThan100Metres"/>
    <xs:enumeration value="equalToOrLessThan200Metres"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: AreaPlacesEnum

| | |
|---|---|
| *Super-types:* | xs:string < **AreaPlacesEnum** (by restriction) |
| *Sub-types:* | • _AreaPlacesEnum (by extension) |

**Name** AreaPlacesEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'atBorders'|'atHighAltitudes'|'inBuiltUpAreas'|'inForestedAreas'|'inGalleries'|'inLowLyingAreas'|'inRuralAreas'|'inShadedAreas'|'inTheInnerCityAreas'|'i

**Documentation** Type of area place(s)

**Schema Component Representation**

```
<xs:simpleType name="AreaPlacesEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="atBorders"/>
    <xs:enumeration value="atHighAltitudes"/>
    <xs:enumeration value="inBuiltUpAreas"/>
    <xs:enumeration value="inForestedAreas"/>
    <xs:enumeration value="inGalleries"/>
    <xs:enumeration value="inLowLyingAreas"/>
    <xs:enumeration value="inRuralAreas"/>
    <xs:enumeration value="inShadedAreas"/>
    <xs:enumeration value="inTheInnerCityAreas"/>
    <xs:enumeration value="inTunnels"/>
    <xs:enumeration value="onBridges"/>
    <xs:enumeration value="onDownhillSections"/>
    <xs:enumeration value="onElevatedSections"/>
    <xs:enumeration value="onEnteringOrLeavingTunnels"/>
    <xs:enumeration value="onFlyovers"/>
    <xs:enumeration value="onPasses"/>
    <xs:enumeration value="onUndergroundSections"/>
    <xs:enumeration value="onUnderpasses"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: CarriagewayEnum

| | |
|---|---|
| *Super-types:* | xs:string < **CarriagewayEnum** (by restriction) |
| *Sub-types:* | • _CarriagewayEnum (by extension) |

**Name** CarriagewayEnum

**Content**

- Base XSD Type: string

- *value* comes from list: {'connectingCarriageway'|'cycleTrack'|'entrySlipRoad'|'exitSlipRoad'|'flyover'|'footpath'|'leftHandFeederRoad'|'leftHandParallelCarriageway'|'mainCarri

**Documentation** List of descriptors identifying specific carriageway details.

**Schema Component Representation**

```
<xs:simpleType name="CarriagewayEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="connectingCarriageway"/>
    <xs:enumeration value="cycleTrack"/>
    <xs:enumeration value="entrySlipRoad"/>
    <xs:enumeration value="exitSlipRoad"/>
    <xs:enumeration value="flyover"/>
    <xs:enumeration value="footpath"/>
    <xs:enumeration value="leftHandFeederRoad"/>
    <xs:enumeration value="leftHandParallelCarriageway"/>
    <xs:enumeration value="mainCarriageway"/>
    <xs:enumeration value="oppositeCarriageway"/>
    <xs:enumeration value="parallelCarriageway"/>
    <xs:enumeration value="rightHandFeederRoad"/>
    <xs:enumeration value="rightHandParallelCarriageway"/>
    <xs:enumeration value="roundabout"/>
    <xs:enumeration value="serviceRoad"/>
    <xs:enumeration value="slipRoads"/>
    <xs:enumeration value="underpass"/>
    <xs:enumeration value="unspecifiedCarriageway"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: DirectionEnum

*Super-types:* xs:string < **DirectionEnum** (by restriction)

*Sub-types:*
- _DirectionEnum (by extension)

**Name** DirectionEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'aligned'|'allDirections'|'anticlockwise'|'bothWays'|'clockwise'|'innerRing'|'outerRing'|'eastBound'|'northBound'|'northEastBound'|'northWestBound'|'sou

**Documentation** List of directions of travel.

**Schema Component Representation**

```
<xs:simpleType name="DirectionEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="aligned"/>
    <xs:enumeration value="allDirections"/>
    <xs:enumeration value="anticlockwise"/>
    <xs:enumeration value="bothWays"/>
    <xs:enumeration value="clockwise"/>
    <xs:enumeration value="innerRing"/>
    <xs:enumeration value="outerRing"/>
    <xs:enumeration value="eastBound"/>
    <xs:enumeration value="northBound"/>
    <xs:enumeration value="northEastBound"/>
    <xs:enumeration value="northWestBound"/>
    <xs:enumeration value="southBound"/>
    <xs:enumeration value="southEastBound"/>
    <xs:enumeration value="southWestBound"/>
    <xs:enumeration value="westBound"/>
    <xs:enumeration value="inboundTowardsTown"/>
    <xs:enumeration value="outboundFromTown"/>
    <xs:enumeration value="opposite"/>
    <xs:enumeration value="unknown"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: DirectionPurposeEnum

*Super-types:* xs:string < **DirectionPurposeEnum** (by restriction)

*Sub-types:*
- _DirectionPurposeEnum (by extension)

**Name** DirectionPurposeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'inbound'|'outbound'|'_extended'}

**Documentation** Main purpose of a direction of a road

**Schema Component Representation**

```
<xs:simpleType name="DirectionPurposeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="inbound"/>
    <xs:enumeration value="outbound"/>
    <xs:enumeration value="_extended"/>
```

```
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: GeographicCharacteristicEnum

| | |
|---|---|
| *Super-types:* | xs:string < **GeographicCharacteristicEnum** (by restriction) |
| *Sub-types:* | • _GeographicCharacteristicEnum (by extension) |

**Name** GeographicCharacteristicEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'aroundABendInRoad'|'onBorder'|'onPass'|'overCrestOfHill'|'_extended'}

**Documentation** Descriptor to help to identify a specific location.

**Schema Component Representation**

```
<xs:simpleType name="GeographicCharacteristicEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="aroundABendInRoad"/>
    <xs:enumeration value="onBorder"/>
    <xs:enumeration value="onPass"/>
    <xs:enumeration value="overCrestOfHill"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: GmlPosList

| | |
|---|---|
| *Super-types:* | com:LongString < **GmlPosList** (by restriction) |
| *Sub-types:* | None |

**Name** GmlPosList

**Content**

- **'LongString' super type was not found in this schema. Its facets could not be printed out.**
- *pattern* = [-+]?[0-9]*\.?[0-9]+(\s[-+]?[0-9]*\.?[0-9]+){3,}

**Documentation** List of coordinates, space-separated, within the same coordinate reference system, defining a geometric entity. Modelled on DirectPositionListType in GML (EN ISO 19136), but constrained to represent a 2D or 3D polyline.

**Schema Component Representation**

```
<xs:simpleType name="GmlPosList">
  <xs:restriction base="com:LongString">
    <xs:pattern value="[-+]?[0-9]*\.?[0-9]+(\s[-+]?[0-9]*\.?[0-9]+){3,}"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: HeightGradeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **HeightGradeEnum** (by restriction) |
| *Sub-types:* | • _HeightGradeEnum (by extension) |

**Name** HeightGradeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'aboveGrade'|'atGrade'|'belowGrade'|'_extended'}

**Documentation** List of height or vertical gradings of road sections.

**Schema Component Representation**

```
<xs:simpleType name="HeightGradeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="aboveGrade"/>
    <xs:enumeration value="atGrade"/>
    <xs:enumeration value="belowGrade"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: HeightTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **HeightTypeEnum** (by restriction) |
| *Sub-types:* | • _HeightTypeEnum (by extension) |

**Name** HeightTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'ellipsoidalHeight'|'gravityRelatedHeight'|'relativeHeight'|'_extended'}

**Documentation** Coded value for type of height

**Schema Component Representation**

```
<xs:simpleType name="HeightTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="ellipsoidalHeight"/>
      <xs:enumeration value="gravityRelatedHeight"/>
      <xs:enumeration value="relativeHeight"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: InfrastructureDescriptorEnum

*Super-types:* xs:string < **InfrastructureDescriptorEnum** (by restriction)

*Sub-types:*

- _InfrastructureDescriptorEnum (by extension)

**Name** InfrastructureDescriptorEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'atMotorwayInterchange'|'atRestArea'|'atServiceArea'|'atTollPlaza'|'atTunnelEntryOrExit'|'inGallery'|'inTunnel'|'onBridge'|'onConnector'|'onElevatedSe

**Documentation** Descriptor identifying infrastructure to help to identify a specific location.

**Schema Component Representation**

```
<xs:simpleType name="InfrastructureDescriptorEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="atMotorwayInterchange"/>
      <xs:enumeration value="atRestArea"/>
      <xs:enumeration value="atServiceArea"/>
      <xs:enumeration value="atTollPlaza"/>
      <xs:enumeration value="atTunnelEntryOrExit"/>
      <xs:enumeration value="inGallery"/>
      <xs:enumeration value="inTunnel"/>
      <xs:enumeration value="onBridge"/>
      <xs:enumeration value="onConnector"/>
      <xs:enumeration value="onElevatedSection"/>
      <xs:enumeration value="onFlyover"/>
      <xs:enumeration value="onIceRoad"/>
      <xs:enumeration value="onLevelCrossing"/>
      <xs:enumeration value="onLinkRoad"/>
      <xs:enumeration value="onRoundabout"/>
      <xs:enumeration value="onTheRoadway"/>
      <xs:enumeration value="onUndergroundSection"/>
      <xs:enumeration value="onUnderpass"/>
      <xs:enumeration value="withinJunction"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: LaneEnum

*Super-types:* xs:string < **LaneEnum** (by restriction)

*Sub-types:*

- _LaneEnum (by extension)

**Name** LaneEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'allLanesCompleteCarriageway'|'busLane'|'busStop'|'carPoolLane'|'centralReservation'|'crawlerLane'|'cycleLane'|'emergencyLane'|'escapeLane'|'exp

**Documentation** List of descriptors identifying specific lanes.

**Schema Component Representation**

```
<xs:simpleType name="LaneEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="allLanesCompleteCarriageway"/>
      <xs:enumeration value="busLane"/>
      <xs:enumeration value="busStop"/>
      <xs:enumeration value="carPoolLane"/>
      <xs:enumeration value="centralReservation"/>
      <xs:enumeration value="crawlerLane"/>
      <xs:enumeration value="cycleLane"/>
      <xs:enumeration value="emergencyLane"/>
      <xs:enumeration value="escapeLane"/>
      <xs:enumeration value="expressLane"/>
      <xs:enumeration value="hardShoulder"/>
      <xs:enumeration value="heavyVehicleLane"/>
      <xs:enumeration value="layBy"/>
      <xs:enumeration value="leftHandTurningLane"/>
      <xs:enumeration value="leftLane"/>
      <xs:enumeration value="localTrafficLane"/>
      <xs:enumeration value="middleLane"/>
```

```
      <xs:enumeration value="overtakingLane"/>
      <xs:enumeration value="rightHandTurningLane"/>
      <xs:enumeration value="rightLane"/>
      <xs:enumeration value="rushHourLane"/>
      <xs:enumeration value="setDownArea"/>
      <xs:enumeration value="slowVehicleLane"/>
      <xs:enumeration value="throughTrafficLane"/>
      <xs:enumeration value="tidalFlowLane"/>
      <xs:enumeration value="turningLane"/>
      <xs:enumeration value="verge"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: LinearDirectionEnum

*Super-types:* xs:string < **LinearDirectionEnum** (by restriction)

*Sub-types:*
- _LinearDirectionEnum (by extension)

**Name** LinearDirectionEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'both'|'opposite'|'aligned'|'unknown'|'_extended'}

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

**Schema Component Representation**

```
<xs:simpleType name="LinearDirectionEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="both"/>
      <xs:enumeration value="opposite"/>
      <xs:enumeration value="aligned"/>
      <xs:enumeration value="unknown"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: LinearElementNatureEnum

*Super-types:* xs:string < **LinearElementNatureEnum** (by restriction)

*Sub-types:*
- _LinearElementNatureEnum (by extension)

**Name** LinearElementNatureEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'road'|'roadSection'|'slipRoad'|'other'|'_extended'}

**Documentation** List of indicative natures of linear elements.

**Schema Component Representation**

```
<xs:simpleType name="LinearElementNatureEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="road"/>
      <xs:enumeration value="roadSection"/>
      <xs:enumeration value="slipRoad"/>
      <xs:enumeration value="other"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: NamedAreaTypeEnum

*Super-types:* xs:string < **NamedAreaTypeEnum** (by restriction)

*Sub-types:*
- _NamedAreaTypeEnum (by extension)

**Name** NamedAreaTypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'applicationRegion'|'continent'|'country'|'countryGroup'|'carParkArea'|'carpoolArea'|'fuzzyArea'|'industrialArea'|'lake'|'meteorologicalArea'|'metropolitar

**Documentation** Types of areas.

**Schema Component Representation**

```
<xs:simpleType name="NamedAreaTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="applicationRegion"/>
      <xs:enumeration value="continent"/>
      <xs:enumeration value="country"/>
      <xs:enumeration value="countryGroup"/>
```

```
      <xs:enumeration value="carParkArea"/>
      <xs:enumeration value="carpoolArea"/>
      <xs:enumeration value="fuzzyArea"/>
      <xs:enumeration value="industrialArea"/>
      <xs:enumeration value="lake"/>
      <xs:enumeration value="meteorologicalArea"/>
      <xs:enumeration value="metropolitanArea"/>
      <xs:enumeration value="municipality"/>
      <xs:enumeration value="parkAndRideSite"/>
      <xs:enumeration value="ruralCounty"/>
      <xs:enumeration value="sea"/>
      <xs:enumeration value="touristArea"/>
      <xs:enumeration value="trafficArea"/>
      <xs:enumeration value="urbanCounty"/>
      <xs:enumeration value="order1AdministrativeArea"/>
      <xs:enumeration value="order2AdministrativeArea"/>
      <xs:enumeration value="order3AdministrativeArea"/>
      <xs:enumeration value="order4AdministrativeArea"/>
      <xs:enumeration value="order5AdministrativeArea"/>
      <xs:enumeration value="policeForceControlArea"/>
      <xs:enumeration value="roadOperatorControlArea"/>
      <xs:enumeration value="waterArea"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: NutsCode

| | |
|---|---|
| *Super-types:* | com:String < **NutsCode** (by restriction) |
| *Sub-types:* | None |

**Name** NutsCode

**Content**

- **'String' super type was not found in this schema. Its facets could not be printed out.**
- *length* <= 5

**Documentation** A NUTS code (Nomenclature of territorial units for statistics).

**Schema Component Representation**

```
<xs:simpleType name="NutsCode">
   <xs:restriction base="com:String">
      <xs:maxLength value="5"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: NutsCodeTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **NutsCodeTypeEnum** (by restriction) |
| *Sub-types:* | • _NutsCodeTypeEnum (by extension) |

**Name** NutsCodeTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'nuts1Code'|'nuts2Code'|'nuts3Code'|'lau1Code'|'lau2Code'|'_extended'}

**Documentation** Types of NUTS codes (Nomenclature of territorial units for statistics) including LAU codes (Local Administrative Units).

**Schema Component Representation**

```
<xs:simpleType name="NutsCodeTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="nuts1Code"/>
      <xs:enumeration value="nuts2Code"/>
      <xs:enumeration value="nuts3Code"/>
      <xs:enumeration value="lau1Code"/>
      <xs:enumeration value="lau2Code"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: OpenIrFormOfWayEnum

| | |
|---|---|
| *Super-types:* | xs:string < **OpenIrFormOfWayEnum** (by restriction) |
| *Sub-types:* | • _OpenIrFormOfWayEnum (by extension) |

**Name** OpenIrFormOfWayEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'undefined'|'motorway'|'multipleCarriageway'|'singleCarriageway'|'roundabout'|'slipRoad'|'trafficSquare'|'other'|'_extended'}

**Documentation** Enumeration of for of way

**Schema Component Representation**

```
<xs:simpleType name="OpenlrFormOfWayEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="undefined"/>
    <xs:enumeration value="motorway"/>
    <xs:enumeration value="multipleCarriageway"/>
    <xs:enumeration value="singleCarriageway"/>
    <xs:enumeration value="roundabout"/>
    <xs:enumeration value="slipRoad"/>
    <xs:enumeration value="trafficSquare"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: OpenlrFunctionalRoadClassEnum

*Super-types:* xs:string < **OpenlrFunctionalRoadClassEnum** (by restriction)

*Sub-types:*
- _OpenlrFunctionalRoadClassEnum (by extension)

**Name** OpenlrFunctionalRoadClassEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'frc0'|'frc1'|'frc2'|'frc3'|'frc4'|'frc5'|'frc6'|'frc7'|'_extended'}

**Documentation** Enumeration of functional road class

**Schema Component Representation**

```
<xs:simpleType name="OpenlrFunctionalRoadClassEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="frc0"/>
    <xs:enumeration value="frc1"/>
    <xs:enumeration value="frc2"/>
    <xs:enumeration value="frc3"/>
    <xs:enumeration value="frc4"/>
    <xs:enumeration value="frc5"/>
    <xs:enumeration value="frc6"/>
    <xs:enumeration value="frc7"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: OpenlrOrientationEnum

*Super-types:* xs:string < **OpenlrOrientationEnum** (by restriction)

*Sub-types:*
- _OpenlrOrientationEnum (by extension)

**Name** OpenlrOrientationEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'noOrientationOrUnknown'|'withLineDirection'|'againstLineDirection'|'both'|'_extended'}

**Documentation** Enumeration of orientation

**Schema Component Representation**

```
<xs:simpleType name="OpenlrOrientationEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="noOrientationOrUnknown"/>
    <xs:enumeration value="withLineDirection"/>
    <xs:enumeration value="againstLineDirection"/>
    <xs:enumeration value="both"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: OpenlrSideOfRoadEnum

*Super-types:* xs:string < **OpenlrSideOfRoadEnum** (by restriction)

*Sub-types:*
- _OpenlrSideOfRoadEnum (by extension)

**Name** OpenlrSideOfRoadEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'onRoadOrUnknown'|'right'|'left'|'both'|'_extended'}

**Documentation** Enumeration of side of road

**Schema Component Representation**

```
<xs:simpleType name="OpenlrSideOfRoadEnum">
```

```
  <xs:restriction base="xs:string">
    <xs:enumeration value="onRoadOrUnknown"/>
    <xs:enumeration value="right"/>
    <xs:enumeration value="left"/>
    <xs:enumeration value="both"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: PositionConfidenceCodedErrorEnum

| | |
|---|---|
| *Super-types:* | xs:string < **PositionConfidenceCodedErrorEnum** (by restriction) |
| *Sub-types:* | • _PositionConfidenceCodedErrorEnum (by extension) |

**Name** PositionConfidenceCodedErrorEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'outOfRange'|'unavailable'|'_extended'}

**Documentation** Error code for horizontal or vertical position confidence

**Schema Component Representation**

```
<xs:simpleType name="PositionConfidenceCodedErrorEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="outOfRange"/>
    <xs:enumeration value="unavailable"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: ReferentTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **ReferentTypeEnum** (by restriction) |
| *Sub-types:* | • _ReferentTypeEnum (by extension) |

**Name** ReferentTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'boundary'|'intersection'|'referenceMarker'|'landmark'|'roadNode'|'_extended'}

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

**Schema Component Representation**

```
<xs:simpleType name="ReferentTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="boundary"/>
    <xs:enumeration value="intersection"/>
    <xs:enumeration value="referenceMarker"/>
    <xs:enumeration value="landmark"/>
    <xs:enumeration value="roadNode"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: RelativePositionOnCarriagewayEnum

| | |
|---|---|
| *Super-types:* | xs:string < **RelativePositionOnCarriagewayEnum** (by restriction) |
| *Sub-types:* | • _RelativePositionOnCarriagewayEnum (by extension) |

**Name** RelativePositionOnCarriagewayEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'inTheCentre'|'onTheLeft'|'onTheRight'|'_extended'}

**Documentation** Identifies a relative position across a carriageway

**Schema Component Representation**

```
<xs:simpleType name="RelativePositionOnCarriagewayEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="inTheCentre"/>
    <xs:enumeration value="onTheLeft"/>
    <xs:enumeration value="onTheRight"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: SubdivisionCode

| | |
|---|---|
| *Super-types:* | com:String < **SubdivisionCode** (by restriction) |
| *Sub-types:* | None |

**Name** SubdivisionCode

**Content**

- **'String' super type was not found in this schema. Its facets could not be printed out.**
- *length* <= 3

**Documentation** The second part of an ISO 3166-2 country sub-division code (up to 3 characters) which may be used along with a CountryCode to make a full ISO 3166-2 subdivision code.

**Schema Component Representation**

```
<xs:simpleType name="SubdivisionCode">
  <xs:restriction base="com:String">
    <xs:maxLength value="3"/>
  </xs:restriction>
</xs:simpleType>
```

top

---

### Simple Type: SubdivisionTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **SubdivisionTypeEnum** (by restriction) |
| *Sub-types:* | _SubdivisionTypeEnum (by extension) |

**Name** SubdivisionTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'administrativeAtoll'|'administrativeRegion'|'administrativeTerritory'|'arcticRegion'|'autonomousCity'|'autonomousCityInNorthAfrica'|'autonomousComm

**Documentation** ISO 3166-2 subdivison types.

**Schema Component Representation**

```
<xs:simpleType name="SubdivisionTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAtoll"/>
    <xs:enumeration value="administrativeRegion"/>
    <xs:enumeration value="administrativeTerritory"/>
    <xs:enumeration value="arcticRegion"/>
    <xs:enumeration value="autonomousCity"/>
    <xs:enumeration value="autonomousCityInNorthAfrica"/>
    <xs:enumeration value="autonomousCommunity"/>
    <xs:enumeration value="autonomousDistrict"/>
    <xs:enumeration value="autonomousProvince"/>
    <xs:enumeration value="autonomousRegion"/>
    <xs:enumeration value="canton"/>
    <xs:enumeration value="capitalCity"/>
    <xs:enumeration value="city"/>
    <xs:enumeration value="cityMunicipality"/>
    <xs:enumeration value="cityOfCountyRight"/>
    <xs:enumeration value="commune"/>
    <xs:enumeration value="councilArea"/>
    <xs:enumeration value="county"/>
    <xs:enumeration value="country"/>
    <xs:enumeration value="department"/>
    <xs:enumeration value="dependency"/>
    <xs:enumeration value="district"/>
    <xs:enumeration value="districtMunicipality"/>
    <xs:enumeration value="districtWithSpecialStatus"/>
    <xs:enumeration value="entity"/>
    <xs:enumeration value="geographicalEntity"/>
    <xs:enumeration value="governorate"/>
    <xs:enumeration value="laender"/>
    <xs:enumeration value="localCouncil"/>
    <xs:enumeration value="londonBorough"/>
    <xs:enumeration value="metropolitanArea"/>
    <xs:enumeration value="metropolitanDepartment"/>
    <xs:enumeration value="metropolitanDistrict"/>
    <xs:enumeration value="metropolitanRegion"/>
    <xs:enumeration value="municipality"/>
    <xs:enumeration value="overseasDepartment"/>
    <xs:enumeration value="overseasRegion"/>
    <xs:enumeration value="overseasTerritorialCollectivity"/>
    <xs:enumeration value="parish"/>
    <xs:enumeration value="province"/>
    <xs:enumeration value="quarter"/>
    <xs:enumeration value="region"/>
    <xs:enumeration value="republic"/>
    <xs:enumeration value="republicanCity"/>
    <xs:enumeration value="selfGovernedPart"/>
    <xs:enumeration value="specialMunicipality"/>
    <xs:enumeration value="state"/>
    <xs:enumeration value="territorialUnit"/>
    <xs:enumeration value="territory"/>
    <xs:enumeration value="twoTierCounty"/>
    <xs:enumeration value="unitaryAuthority"/>
    <xs:enumeration value="ward"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc01AreaLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc01AreaLocationSubtypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc01AreaLocationSubtypeEnum (by extension) |

**Name** TpegLoc01AreaLocationSubtypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'largeArea'|'other'|'_extended'}

**Documentation** Types of area.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc01AreaLocationSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="largeArea"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc01FramedPointLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc01FramedPointLocationSubtypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc01FramedPointLocationSubtypeEnum (by extension) |

**Name** TpegLoc01FramedPointLocationSubtypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'framedPoint'|'_extended'}

**Documentation** Types of points on the road network framed by two other points on the same road.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc01FramedPointLocationSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="framedPoint"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc01LinearLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc01LinearLocationSubtypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc01LinearLocationSubtypeEnum (by extension) |

**Name** TpegLoc01LinearLocationSubtypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'segment'|'_extended'}

**Documentation** Types of linear location.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc01LinearLocationSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="segment"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc01SimplePointLocationSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc01SimplePointLocationSubtypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc01SimplePointLocationSubtypeEnum (by extension) |

**Name** TpegLoc01SimplePointLocationSubtypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'intersection'|'nonLinkedPoint'|'_extended'}

**Documentation** Types of simple point.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc01SimplePointLocationSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="intersection"/>
    <xs:enumeration value="nonLinkedPoint"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: TpegLoc03AreaDescriptorSubtypeEnum

*Super-types:* xs:string < **TpegLoc03AreaDescriptorSubtypeEnum** (by restriction)

*Sub-types:*
- _TpegLoc03AreaDescriptorSubtypeEnum (by extension)

**Name** TpegLoc03AreaDescriptorSubtypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'administrativeAreaName'|'administrativeReferenceName'|'areaName'|'countyName'|'lakeName'|'nationName'|'policeForceControlAreaName'|'region

**Documentation** Descriptors for describing area locations.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc03AreaDescriptorSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName"/>
    <xs:enumeration value="administrativeReferenceName"/>
    <xs:enumeration value="areaName"/>
    <xs:enumeration value="countyName"/>
    <xs:enumeration value="lakeName"/>
    <xs:enumeration value="nationName"/>
    <xs:enumeration value="policeForceControlAreaName"/>
    <xs:enumeration value="regionName"/>
    <xs:enumeration value="seaName"/>
    <xs:enumeration value="townName"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: TpegLoc03IlcPointDescriptorSubtypeEnum

*Super-types:* xs:string < **TpegLoc03IlcPointDescriptorSubtypeEnum** (by restriction)

*Sub-types:*
- _TpegLoc03IlcPointDescriptorSubtypeEnum (by extension)

**Name** TpegLoc03IlcPointDescriptorSubtypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'tpegIlcName1'|'tpegIlcName2'|'tpegIlcName3'|'_extended'}

**Documentation** Descriptors for describing a junction by identifying the intersecting roads at a road junction.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc03IlcPointDescriptorSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="tpegIlcName1"/>
    <xs:enumeration value="tpegIlcName2"/>
    <xs:enumeration value="tpegIlcName3"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: TpegLoc03JunctionPointDescriptorSubtypeEnum

*Super-types:* xs:string < **TpegLoc03JunctionPointDescriptorSubtypeEnum** (by restriction)

*Sub-types:*
- _TpegLoc03JunctionPointDescriptorSubtypeEnum (by extension)

**Name** TpegLoc03JunctionPointDescriptorSubtypeEnum

**Content**
- Base XSD Type: string
- *value* comes from list: {'junctionName'|'_extended'}

**Documentation** Descriptors for describing a point at a road junction.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc03JunctionPointDescriptorSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="junctionName"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc03OtherPointDescriptorSubtypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc03OtherPointDescriptorSubtypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc03OtherPointDescriptorSubtypeEnum (by extension) |

**Name** TpegLoc03OtherPointDescriptorSubtypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'administrativeAreaName'|'administrativeReferenceName'|'airportName'|'areaName'|'buildingName'|'busStopIdentifier'|'busStopName'|'canalName'|'

**Documentation** Descriptors other than junction names and road descriptors which can help to identify the location of points on the road network.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc03OtherPointDescriptorSubtypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="administrativeAreaName"/>
    <xs:enumeration value="administrativeReferenceName"/>
    <xs:enumeration value="airportName"/>
    <xs:enumeration value="areaName"/>
    <xs:enumeration value="buildingName"/>
    <xs:enumeration value="busStopIdentifier"/>
    <xs:enumeration value="busStopName"/>
    <xs:enumeration value="canalName"/>
    <xs:enumeration value="countyName"/>
    <xs:enumeration value="ferryPortName"/>
    <xs:enumeration value="intersectionName"/>
    <xs:enumeration value="lakeName"/>
    <xs:enumeration value="linkName"/>
    <xs:enumeration value="localLinkName"/>
    <xs:enumeration value="metroStationName"/>
    <xs:enumeration value="nationName"/>
    <xs:enumeration value="nonLinkedPointName"/>
    <xs:enumeration value="parkingFacilityName"/>
    <xs:enumeration value="pointName"/>
    <xs:enumeration value="pointOfInterestName"/>
    <xs:enumeration value="railwayStation"/>
    <xs:enumeration value="regionName"/>
    <xs:enumeration value="riverName"/>
    <xs:enumeration value="seaName"/>
    <xs:enumeration value="serviceAreaName"/>
    <xs:enumeration value="tidalRiverName"/>
    <xs:enumeration value="townName"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

### Simple Type: TpegLoc04HeightTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TpegLoc04HeightTypeEnum** (by restriction) |
| *Sub-types:* | • _TpegLoc04HeightTypeEnum (by extension) |

**Name** TpegLoc04HeightTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'above'|'aboveSeaLevel'|'aboveStreetLevel'|'at'|'atSeaLevel'|'atStreetLevel'|'below'|'belowSeaLevel'|'belowStreetLevel'|'undefined'|'unknown'|'other'|'_

**Documentation** Types of height.

**Schema Component Representation**

```
<xs:simpleType name="TpegLoc04HeightTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="above"/>
    <xs:enumeration value="aboveSeaLevel"/>
    <xs:enumeration value="aboveStreetLevel"/>
    <xs:enumeration value="at"/>
    <xs:enumeration value="atSeaLevel"/>
    <xs:enumeration value="atStreetLevel"/>
    <xs:enumeration value="below"/>
    <xs:enumeration value="belowSeaLevel"/>
    <xs:enumeration value="belowStreetLevel"/>
    <xs:enumeration value="undefined"/>
    <xs:enumeration value="unknown"/>
    <xs:enumeration value="other"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

# DATEXII_3_Parking

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- Schema Document Properties
- Global Definitions
  - Complex Type: **RoadInformationEnhanced**
  - Complex Type: **_RoadTypeEnum**
  - Simple Type: **RoadTypeEnum**


top

## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/parking** |
| **Version** | 1 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/locationReferencing* (at DATEXII_3_LocationReferencing.xsd)<br>  ◦ *http://datex2.eu/schema/3/facilities* (at DATEXII_3_Facilities.xsd)<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd)<br>  ◦ *http://datex2.eu/schema/3/roadTrafficData* (at DATEXII_3_RoadTrafficData.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| loc | http://datex2.eu/schema/3/locationReferencing |
| fac | http://datex2.eu/schema/3/facilities |
| com | http://datex2.eu/schema/3/common |
| roa | http://datex2.eu/schema/3/roadTrafficData |
| prk | **http://datex2.eu/schema/3/parking** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="1" targetNamespace="http://datex2.eu/schema/3/parking">
   <xs:import namespace="http://datex2.eu/schema/3/locationReferencing"
   schemaLocation="DATEXII_3_LocationReferencing.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/facilities"
   schemaLocation="DATEXII_3_Facilities.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/common"
   schemaLocation="DATEXII_3_Common.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/roadTrafficData"
   schemaLocation="DATEXII_3_RoadTrafficData.xsd"/>
   ...
</xs:schema>
```

top

# Global Definitions

## Complex Type: RoadInformationEnhanced

| | |
|---|---|
| *Super-types:* | loc:RoadInformation < **RoadInformationEnhanced** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | RoadInformationEnhanced |
| **Abstract** | no |
| **Documentation** | Additional road information. |

**XML Instance Representation**

```
<...>
   <!-- 'loc:RoadInformation' super type was not found in this schema. Some
   elements and attributes may be missing. -->
   <prk:typeOfRoad> prk:_RoadTypeEnum </prk:typeOfRoad> [0..1] ?
   <prk:roadOrigination> com:MultilingualString </prk:roadOrigination> [0..*]
   ?
   <prk:_roadInformationEnhancedExtension> com:_ExtensionType
   </prk:_roadInformationEnhancedExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="RoadInformationEnhanced">
   <xs:complexContent>
      <xs:extension base="loc:RoadInformation">
         <xs:sequence>
            <xs:element name="typeOfRoad" type="prk:_RoadTypeEnum"
            minOccurs="0" maxOccurs="1"/>
            <xs:element name="roadOrigination" type="com:MultilingualString"
            minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="_roadInformationEnhancedExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _RoadTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < RoadTypeEnum (by restriction) < **_RoadTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _RoadTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   prk:RoadTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_RoadTypeEnum">
   <xs:simpleContent>
      <xs:extension base="prk:RoadTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Simple Type: RoadTypeEnum

*Super-types:* xs:string < **RoadTypeEnum** (by restriction)

*Sub-types:*

- _RoadTypeEnum (by extension)

**Name** RoadTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'motorway'|'trunkRoad'|'mainRoad'|'other'|'_extended'}

**Documentation** Categorisation of the road type (motorway,main road,...).

**Schema Component Representation**

```
<xs:simpleType name="RoadTypeEnum">
   <xs:restriction base="xs:string">
      <xs:enumeration value="motorway"/>
      <xs:enumeration value="trunkRoad"/>
      <xs:enumeration value="mainRoad"/>
      <xs:enumeration value="other"/>
      <xs:enumeration value="_extended"/>
   </xs:restriction>
</xs:simpleType>
```

top

# DATEXII_3_RoadTrafficData

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  - Complex Type: **AxleFlowValue**
  - Complex Type: **BasicData**
  - Complex Type: **DailyTrafficFlowValue**
  - Complex Type: **DurationValue**
  - Complex Type: **MeasuredDataPublication**
  - Complex Type: **MeasurementOrCalculationTime**
  - Complex Type: **MeasurementSite**
  - Complex Type: **MeasurementSiteTable**
  - Complex Type: **MeasurementSiteTablePublication**
  - Complex Type: **MeasurementSpecificCharacteristics**
  - Complex Type: **PcuFlowValue**
  - Complex Type: **PhysicalQuantity**
  - Complex Type: **SinglePhysicalQuantity**
  - Complex Type: **SiteMeasurements**
  - Complex Type: **SpeedPercentile**
  - Complex Type: **TrafficConcentration**
  - Complex Type: **TrafficData**
  - Complex Type: **TrafficDensityValue**
  - Complex Type: **TrafficFlow**
  - Complex Type: **TrafficGap**
  - Complex Type: **TrafficHeadway**
  - Complex Type: **TrafficSpeed**
  - Complex Type: **_MeasuredOrDerivedDataTypeEnum**
  - Complex Type: **_MeasurementSiteIndexMeasurementSpecificCharacteristics**
  - Complex Type: **_MeasurementSiteTableVersionedReference**
  - Complex Type: **_MeasurementSiteVersionedReference**
  - Complex Type: **_SiteMeasurementsIndexPhysicalQuantity**
  - Complex Type: **_TimeMeaningEnum**
  - Simple Type: **DensityVehiclesPerKilometre**
  - Simple Type: **MeasuredOrDerivedDataTypeEnum**
  - Simple Type: **PassengerCarUnitsPerHour**
  - Simple Type: **TimeMeaningEnum**
  - Simple Type: **VehiclesPerDay**


top

## Schema Document Properties

| | |
|---|---|
| **Target Namespace** | **http://datex2.eu/schema/3/roadTrafficData** |
| **Version** | 3.3 |
| **Element and Attribute Namespaces** | • Global element and attribute declarations belong to this schema's target namespace.<br>• By default, local element declarations belong to this schema's target namespace.<br>• By default, local attribute declarations have no namespace. |
| **Schema Composition** | • This schema imports schema(s) from the following namespace(s):<br>  ◦ *http://datex2.eu/schema/3/locationReferencing* (at DATEXII_3_LocationReferencing.xsd)<br>  ◦ *http://datex2.eu/schema/3/common* (at DATEXII_3_Common.xsd) |

### Declared Namespaces

| Prefix | Namespace |
|---|---|

| | |
|---|---|
| xml | http://www.w3.org/XML/1998/namespace |
| xs | http://www.w3.org/2001/XMLSchema |
| loc | http://datex2.eu/schema/3/locationReferencing |
| com | http://datex2.eu/schema/3/common |
| roa | **http://datex2.eu/schema/3/roadTrafficData** |

**Schema Component Representation**

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.3" targetNamespace="http://datex2.eu/schema/3/roadTrafficData">
   <xs:import namespace="http://datex2.eu/schema/3/locationReferencing"
   schemaLocation="DATEXII_3_LocationReferencing.xsd"/>
   <xs:import namespace="http://datex2.eu/schema/3/common"
   schemaLocation="DATEXII_3_Common.xsd"/>
   ...
</xs:schema>
```

top

# Global Definitions

## Complex Type: AxleCharacteristics

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AxleCharacteristics |
| **Abstract** | no |
| **Documentation** | Characteristics of vehicle axles |

**XML Instance Representation**

```
<...>
   <roa:maximumWeight> com:Tonnes </roa:maximumWeight> [0..1] ?
   <roa:minimumWeight> com:Tonnes </roa:minimumWeight> [0..1] ?
   <roa:_axleCharacteristicsExtension> com:_ExtensionType
   </roa:_axleCharacteristicsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AxleCharacteristics">
   <xs:sequence>
      <xs:element name="maximumWeight" type="com:Tonnes" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="minimumWeight" type="com:Tonnes" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="_axleCharacteristicsExtension"
      type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: AxleFlowValue

| | |
|---|---|
| *Super-types:* | com:DataValue < **AxleFlowValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | AxleFlowValue |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | A measured or calculated value of the flow rate of vehicle axles. |

**XML Instance Representation**

```
<...>
   <!-- 'com:DataValue' super type was not found in this schema. Some elements
   and attributes may be missing. -->
   <roa:axleFlowRate> com:AxlesPerHour </roa:axleFlowRate> [1] ?
   <roa:_axleFlowValueExtension> com:_ExtensionType
   </roa:_axleFlowValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="AxleFlowValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="axleFlowRate" type="com:AxlesPerHour"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_axleFlowValueExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: BasicData

*Super-types:* None

*Sub-types:*

- TrafficData (by extension)
  - TrafficConcentration (by extension)
  - TrafficFlow (by extension)
  - TrafficGap (by extension)
  - TrafficHeadway (by extension)
  - TrafficSpeed (by extension)

| | |
|---|---|
| **Name** | BasicData |
| **Abstract** | yes |
| **Documentation** | Data that are either measured or calculated at the same time or over the same time period. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="BasicData" abstract="true">
   <xs:sequence>
      <xs:element name="measurementOrCalculationTime"
      type="roa:MeasurementOrCalculationTime" minOccurs="0"/>
      <xs:element name="_basicDataExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: DailyTrafficFlowValue

| | |
|---|---|
| *Super-types:* | com:DataValue < **DailyTrafficFlowValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | DailyTrafficFlowValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of daily traffic flow |

**XML Instance Representation**

```
<...>
   <!-- 'com:DataValue' super type was not found in this schema. Some elements
   and attributes may be missing. -->
   <roa:vehicleFlowRate> roa:VehiclesPerDay </roa:vehicleFlowRate> [1] ?
   <roa:_dailyTrafficFlowValueExtension> com:_ExtensionType
   </roa:_dailyTrafficFlowValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DailyTrafficFlowValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="vehicleFlowRate" type="roa:VehiclesPerDay"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_dailyTrafficFlowValueExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: DurationValue

| | |
|---|---|
| *Super-types:* | com:DataValue < **DurationValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | DurationValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of a period of time. |

**XML Instance Representation**

```
<...>
   <!-- 'com:DataValue' super type was not found in this schema. Some elements
   and attributes may be missing. -->
   <roa:duration> com:Seconds </roa:duration> [1] ?
   <roa:_durationValueExtension> com:_ExtensionType
   </roa:_durationValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="DurationValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
```

```
        <xs:sequence>
          <xs:element name="duration" type="com:Seconds" minOccurs="1"
          maxOccurs="1"/>
          <xs:element name="_durationValueExtension" type="com:_ExtensionType"
          minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: MeasuredDataPublication

| | |
|---|---|
| *Super-types:* | com:PayloadPublication < **MeasuredDataPublication** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasuredDataPublication |
| **Abstract** | no |
| **Documentation** | A publication containing one or more measurement data sets, each set being measured at a single measurement site. |

**XML Instance Representation**

```
<...>
   <!-- 'com:PayloadPublication' super type was not found in this schema. Some
   elements and attributes may be missing. -->
   <roa:measurementSiteTableReference>
   roa:_MeasurementSiteTableVersionedReference
   </roa:measurementSiteTableReference> [1..*] ?
   <roa:headerInformation> com:HeaderInformation </roa:headerInformation> [1]
   <roa:siteMeasurements> roa:SiteMeasurements </roa:siteMeasurements> [1..*]
   <roa:_measuredDataPublicationExtension> com:_ExtensionType
   </roa:_measuredDataPublicationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasuredDataPublication">
   <xs:complexContent>
      <xs:extension base="com:PayloadPublication">
         <xs:sequence>
            <xs:element name="measurementSiteTableReference"
            type="roa:_MeasurementSiteTableVersionedReference" minOccurs="1"
            maxOccurs="unbounded"/>
            <xs:element name="headerInformation" type="com:HeaderInformation"/>
            <xs:element name="siteMeasurements" type="roa:SiteMeasurements"
            maxOccurs="unbounded"/>
            <xs:element name="_measuredDataPublicationExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: MeasurementOrCalculationTime

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasurementOrCalculationTime |

| | |
|---|---|
| **Abstract** | no |
| **Documentation** | Describes the time at which a measured or calculated value or set of values was measured or calculated. It may be a future time at which a data value is predicted to apply. |

**XML Instance Representation**

```
<...
 timePrecision="com:TimePrecisionEnum [0..1] ?">
   <roa:timeMeaning> roa:_TimeMeaningEnum </roa:timeMeaning> [0..1] ?
   <roa:timeValue> com:DateTime </roa:timeValue> [0..1] ?
   <roa:period> com:Period </roa:period> [0..1] ?
   <roa:_measurementOrCalculationTimeExtension> com:_ExtensionType
   </roa:_measurementOrCalculationTimeExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasurementOrCalculationTime">
   <xs:sequence>
      <xs:element name="timeMeaning" type="roa:_TimeMeaningEnum" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="timeValue" type="com:DateTime" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="period" type="com:Period" minOccurs="0"/>
      <xs:element name="_measurementOrCalculationTimeExtension"
      type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
   <xs:attribute name="timePrecision" type="com:TimePrecisionEnum"
   use="optional"/>
</xs:complexType>
```

top

---

## Complex Type: MeasurementSite

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasurementSite |
| **Abstract** | no |
| **Documentation** | An identifiable single measurement site entry/record in the measurement site table. |

**XML Instance Representation**

```
<...
 id="xs:string [1]"
 version="xs:string [1]">
   <roa:measurementSiteRecordVersionTime> com:DateTime
   </roa:measurementSiteRecordVersionTime> [0..1] ?
   <roa:measurementSiteName> com:MultilingualString </roa:measurementSiteName>
   [0..1] ?
   <roa:measurementSiteIdentification> com:String
   </roa:measurementSiteIdentification> [0..1] ?
   <roa:measurementSpecificCharacteristics>
   roa:_MeasurementSiteIndexMeasurementSpecificCharacteristics
   </roa:measurementSpecificCharacteristics> [0..*] ?
   <roa:measurementSiteLocation> loc:LocationReference
   </roa:measurementSiteLocation> [1]
   <roa:informationManagerOverride> com:InternationalIdentifier
   </roa:informationManagerOverride> [0..1] ?
   <roa:_measurementSiteExtension> com:_ExtensionType
   </roa:_measurementSiteExtension> [0..1]
```

```
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasurementSite">
   <xs:sequence>
      <xs:element name="measurementSiteRecordVersionTime" type="com:DateTime"
      minOccurs="0" maxOccurs="1"/>
      <xs:element name="measurementSiteName" type="com:MultilingualString"
      minOccurs="0" maxOccurs="1"/>
      <xs:element name="measurementSiteIdentification" type="com:String"
      minOccurs="0" maxOccurs="1"/>
      <xs:element name="measurementSpecificCharacteristics"
      type="roa:_MeasurementSiteIndexMeasurementSpecificCharacteristics"
      minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="measurementSiteLocation" type="loc:LocationReference"/>
      <xs:element name="informationManagerOverride"
      type="com:InternationalIdentifier" minOccurs="0"/>
      <xs:element name="_measurementSiteExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
   <xs:attribute name="id" type="xs:string" use="required"/>
   <xs:attribute name="version" type="xs:string" use="required"/>
</xs:complexType>
```

top

## Complex Type: MeasurementSiteTable

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasurementSiteTable |
| **Abstract** | no |
| **Documentation** | A Measurement Site Table comprising a number of sets of data, each describing the location from where a stream of measured data may be derived. Each location is known as a "measurement site" which can be a point, a linear road section or an area. |

**XML Instance Representation**

```
<...
 id="xs:string [1]"
 version="xs:string [1]">
   <roa:measurementSiteTableIdentification> com:String
   </roa:measurementSiteTableIdentification> [0..1] ?
   <roa:measurementSite> roa:MeasurementSite </roa:measurementSite> [1..*]
   <roa:informationManager> com:InternationalIdentifier
   </roa:informationManager> [0..1] ?
   <roa:_measurementSiteTableExtension> com:_ExtensionType
   </roa:_measurementSiteTableExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasurementSiteTable">
   <xs:sequence>
      <xs:element name="measurementSiteTableIdentification" type="com:String"
      minOccurs="0" maxOccurs="1"/>
      <xs:element name="measurementSite" type="roa:MeasurementSite"
      maxOccurs="unbounded"/>
      <xs:element name="informationManager" type="com:InternationalIdentifier"
      minOccurs="0"/>
      <xs:element name="_measurementSiteTableExtension"
      type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
```

```
   <xs:attribute name="id" type="xs:string" use="required"/>
   <xs:attribute name="version" type="xs:string" use="required"/>
</xs:complexType>
```

top

## Complex Type: MeasurementSiteTablePublication

| | |
|---|---|
| *Super-types:* | com:PayloadPublication < **MeasurementSiteTablePublication** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasurementSiteTablePublication |
| **Abstract** | no |
| **Documentation** | A publication containing one or more Measurement Site Tables. |

**XML Instance Representation**

```
<...>
   <!-- 'com:PayloadPublication' super type was not found in this schema. Some
   elements and attributes may be missing. -->
   <roa:headerInformation> com:HeaderInformation </roa:headerInformation> [1]
   <roa:measurementSiteTable> roa:MeasurementSiteTable
   </roa:measurementSiteTable> [1..*]
   <roa:_measurementSiteTablePublicationExtension> com:_ExtensionType
   </roa:_measurementSiteTablePublicationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasurementSiteTablePublication">
   <xs:complexContent>
      <xs:extension base="com:PayloadPublication">
         <xs:sequence>
            <xs:element name="headerInformation" type="com:HeaderInformation"/>
            <xs:element name="measurementSiteTable"
            type="roa:MeasurementSiteTable" maxOccurs="unbounded"/>
            <xs:element name="_measurementSiteTablePublicationExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: MeasurementSpecificCharacteristics

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | MeasurementSpecificCharacteristics |
| **Abstract** | no |
| **Documentation** | Characteristics which are specific to an individual measurement type (specified in a known order) at the given measurement site. |

**XML Instance Representation**

```
<...>
   <roa:period> com:Seconds </roa:period> [0..1] ?
   <roa:specificMeasurementValueType> roa:_MeasuredOrDerivedDataTypeEnum
   </roa:specificMeasurementValueType> [1] ?
```

```
   <roa:specificVehicleCharacteristics> com:VehicleCharacteristics
   </roa:specificVehicleCharacteristics> [0..1]
   <roa:_measurementSpecificCharacteristicsExtension> com:_ExtensionType
   </roa:_measurementSpecificCharacteristicsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="MeasurementSpecificCharacteristics">
   <xs:sequence>
      <xs:element name="period" type="com:Seconds" minOccurs="0"
      maxOccurs="1"/>
      <xs:element name="specificMeasurementValueType"
      type="roa:_MeasuredOrDerivedDataTypeEnum" minOccurs="1" maxOccurs="1"/>
      <xs:element name="specificVehicleCharacteristics"
      type="com:VehicleCharacteristics" minOccurs="0"/>
      <xs:element name="_measurementSpecificCharacteristicsExtension"
      type="com:_ExtensionType" minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: PcuFlowValue

| | |
|---|---|
| *Super-types:* | com:DataValue < **PcuFlowValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | PcuFlowValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of the flow rate of passenger car units. |

**XML Instance Representation**

```
<...>
   <!-- 'com:DataValue' super type was not found in this schema. Some elements
   and attributes may be missing. -->
   <roa:pcuFlowRate> roa:PassengerCarUnitsPerHour </roa:pcuFlowRate> [1] ?
   <roa:_pcuFlowValueExtension> com:_ExtensionType
   </roa:_pcuFlowValueExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PcuFlowValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="pcuFlowRate" type="roa:PassengerCarUnitsPerHour"
            minOccurs="1" maxOccurs="1"/>
            <xs:element name="_pcuFlowValueExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: PhysicalQuantity

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | |

- SinglePhysicalQuantity (by extension)

| | |
|---|---|
| **Name** | PhysicalQuantity |
| **Abstract** | yes |
| **Documentation** | A measured or calculated physical quantity, with related properties explaining its context, meaning or status |

**XML Instance Representation**

```
<...>
   <roa:pertinentLocation> loc:LocationReference </roa:pertinentLocation>
   [0..1] ?
   <roa:source> com:Source </roa:source> [0..1]
   <roa:_physicalQuantityExtension> com:_ExtensionType
   </roa:_physicalQuantityExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="PhysicalQuantity" abstract="true">
   <xs:sequence>
      <xs:element name="pertinentLocation" type="loc:LocationReference"
      minOccurs="0"/>
      <xs:element name="source" type="com:Source" minOccurs="0"/>
      <xs:element name="_physicalQuantityExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SinglePhysicalQuantity

| | |
|---|---|
| *Super-types:* | PhysicalQuantity < **SinglePhysicalQuantity** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SinglePhysicalQuantity |
| **Abstract** | no |
| **Documentation** | A measured or calculated physical quantity at a single instant or period in time, with related properties explaining its context, meaning or status |

**XML Instance Representation**

```
<...>
   <roa:pertinentLocation> loc:LocationReference </roa:pertinentLocation>
   [0..1] ?
   <roa:source> com:Source </roa:source> [0..1]
   <roa:_physicalQuantityExtension> com:_ExtensionType
   </roa:_physicalQuantityExtension> [0..1]
   <roa:basicData> roa:BasicData </roa:basicData> [0..1]
   <roa:_singlePhysicalQuantityExtension> com:_ExtensionType
   </roa:_singlePhysicalQuantityExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SinglePhysicalQuantity">
   <xs:complexContent>
      <xs:extension base="roa:PhysicalQuantity">
         <xs:sequence>
            <xs:element name="basicData" type="roa:BasicData" minOccurs="0"/>
            <xs:element name="_singlePhysicalQuantityExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
```

```
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: SiteMeasurements

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SiteMeasurements |
| **Abstract** | no |
| **Documentation** | A measurement data set derived from a specific measurement site. |

**XML Instance Representation**

```
<...>
   <roa:measurementSiteReference> roa:_MeasurementSiteVersionedReference
   </roa:measurementSiteReference> [1] ?
   <roa:physicalQuantity> roa:_SiteMeasurementsIndexPhysicalQuantity
   </roa:physicalQuantity> [0..*] ?
   <roa:measurementTimeDefault> roa:MeasurementOrCalculationTime
   </roa:measurementTimeDefault> [1] ?
   <roa:_siteMeasurementsExtension> com:_ExtensionType
   </roa:_siteMeasurementsExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SiteMeasurements">
   <xs:sequence>
      <xs:element name="measurementSiteReference"
      type="roa:_MeasurementSiteVersionedReference" minOccurs="1"
      maxOccurs="1"/>
      <xs:element name="physicalQuantity"
      type="roa:_SiteMeasurementsIndexPhysicalQuantity" minOccurs="0"
      maxOccurs="unbounded"/>
      <xs:element name="measurementTimeDefault"
      type="roa:MeasurementOrCalculationTime"/>
      <xs:element name="_siteMeasurementsExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: SpeedPercentile

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | SpeedPercentile |
| **Abstract** | no |
| **Documentation** | Details of percentage (from an observation set) of vehicles whose speeds fall below a stated value. |

**XML Instance Representation**

```
<...>
   <roa:vehiclePercentage> com:PercentageValue </roa:vehiclePercentage> [1] ?
```

```
   <roa:speedPercentile> com:SpeedValue </roa:speedPercentile> [1] ?
   <roa:_speedPercentileExtension> com:_ExtensionType
   </roa:_speedPercentileExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="SpeedPercentile">
   <xs:sequence>
      <xs:element name="vehiclePercentage" type="com:PercentageValue"/>
      <xs:element name="speedPercentile" type="com:SpeedValue"/>
      <xs:element name="_speedPercentileExtension" type="com:_ExtensionType"
      minOccurs="0"/>
   </xs:sequence>
</xs:complexType>
```

top

## Complex Type: TrafficConcentration

| | |
|---|---|
| *Super-types:* | BasicData < TrafficData (by extension) < **TrafficConcentration** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficConcentration |
| **Abstract** | no |
| **Documentation** | Averaged measurements or calculations of traffic concentration. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
   <roa:density> roa:TrafficDensityValue </roa:density> [0..1] ?
   <roa:occupancy> com:PercentageValue </roa:occupancy> [0..1] ?
   <roa:_trafficConcentrationExtension> com:_ExtensionType
   </roa:_trafficConcentrationExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficConcentration">
   <xs:complexContent>
      <xs:extension base="roa:TrafficData">
         <xs:sequence>
            <xs:element name="density" type="roa:TrafficDensityValue"
            minOccurs="0"/>
            <xs:element name="occupancy" type="com:PercentageValue"
            minOccurs="0"/>
            <xs:element name="_trafficConcentrationExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficData

| | |
|---|---|
| *Super-types:* | BasicData < **TrafficData** (by extension) |
| *Sub-types:* | • TrafficConcentration (by extension)<br>• TrafficFlow (by extension)<br>• TrafficGap (by extension)<br>• TrafficHeadway (by extension)<br>• TrafficSpeed (by extension) |

| | |
|---|---|
| **Name** | TrafficData |
| **Abstract** | yes |
| **Documentation** | Measured or derived values relating to traffic or individual vehicle movements on a specific section or at a specific point on the road network. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficData" abstract="true">
   <xs:complexContent>
      <xs:extension base="roa:BasicData">
         <xs:sequence>
            <xs:element name="forVehiclesWithCharacteristicsOf"
            type="com:VehicleCharacteristics" minOccurs="0"/>
            <xs:element name="_trafficDataExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficDensityValue

| | |
|---|---|
| *Super-types:* | com:DataValue < **TrafficDensityValue** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficDensityValue |
| **Abstract** | no |
| **Documentation** | A measured or calculated value of the density of vehicles on a unit stretch of road in a given direction. |

**XML Instance Representation**

```
<...>
   <!-- 'com:DataValue' super type was not found in this schema. Some elements
   and attributes may be missing. -->
   <roa:densityOfVehicles> roa:DensityVehiclesPerKilometre
   </roa:densityOfVehicles> [1] ?
   <roa:_trafficDensityValueExtension> com:_ExtensionType
   </roa:_trafficDensityValueExtension> [0..1]
```

```
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficDensityValue">
   <xs:complexContent>
      <xs:extension base="com:DataValue">
         <xs:sequence>
            <xs:element name="densityOfVehicles"
            type="roa:DensityVehiclesPerKilometre" minOccurs="1" maxOccurs="1"/>
            <xs:element name="_trafficDensityValueExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficFlow

| | |
|---|---|
| *Super-types:* | BasicData < TrafficData (by extension) < **TrafficFlow** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficFlow |
| **Abstract** | no |
| **Documentation** | Averaged measurements or calculations of traffic flow rates. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
   <roa:axleFlow> roa:AxleFlowValue </roa:axleFlow> [0..1] ?
   <roa:pcuFlow> roa:PcuFlowValue </roa:pcuFlow> [0..1] ?
   <roa:percentageLongVehicles> com:PercentageValue
   </roa:percentageLongVehicles> [0..1] ?
   <roa:vehicleFlow> com:VehicleFlowValue </roa:vehicleFlow> [0..1] ?
   <roa:normallyExpectedFlow> com:VehicleFlowValue </roa:normallyExpectedFlow>
   [0..1] ?
   <roa:annualAverageDailyTraffic> roa:DailyTrafficFlowValue
   </roa:annualAverageDailyTraffic> [0..1] ?
   <roa:monthlyAverageDailyTraffic> roa:DailyTrafficFlowValue
   </roa:monthlyAverageDailyTraffic> [0..1] ?
   <roa:axleCharacteristics> roa:AxleCharacteristics
   </roa:axleCharacteristics> [0..1] ?
   <roa:_trafficFlowExtension> com:_ExtensionType </roa:_trafficFlowExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficFlow">
   <xs:complexContent>
      <xs:extension base="roa:TrafficData">
         <xs:sequence>
            <xs:element name="axleFlow" type="roa:AxleFlowValue" minOccurs="0"/>
            <xs:element name="pcuFlow" type="roa:PcuFlowValue" minOccurs="0"/>
```

```
            <xs:element name="percentageLongVehicles" type="com:PercentageValue"
            minOccurs="0"/>
            <xs:element name="vehicleFlow" type="com:VehicleFlowValue"
            minOccurs="0"/>
            <xs:element name="normallyExpectedFlow" type="com:VehicleFlowValue"
            minOccurs="0"/>
            <xs:element name="annualAverageDailyTraffic"
            type="roa:DailyTrafficFlowValue" minOccurs="0"/>
            <xs:element name="monthlyAverageDailyTraffic"
            type="roa:DailyTrafficFlowValue" minOccurs="0"/>
            <xs:element name="axleCharacteristics"
            type="roa:AxleCharacteristics" minOccurs="0"/>
            <xs:element name="_trafficFlowExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficGap

| | |
|---|---|
| *Super-types:* | BasicData < TrafficData (by extension) < **TrafficGap** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficGap |
| **Abstract** | no |
| **Documentation** | Averaged measurements or calculations of traffic gap i.e. the distance or time interval between vehicles, measured between the rear of one vehicle and the front of the following vehicle. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
   <roa:averageDistanceGap> com:FloatingPointMetreDistanceValue
   </roa:averageDistanceGap> [0..1] ?
   <roa:averageTimeGap> roa:DurationValue </roa:averageTimeGap> [0..1] ?
   <roa:_trafficGapExtension> com:_ExtensionType </roa:_trafficGapExtension>
   [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficGap">
   <xs:complexContent>
      <xs:extension base="roa:TrafficData">
         <xs:sequence>
            <xs:element name="averageDistanceGap"
            type="com:FloatingPointMetreDistanceValue" minOccurs="0"/>
            <xs:element name="averageTimeGap" type="roa:DurationValue"
            minOccurs="0"/>
            <xs:element name="_trafficGapExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficHeadway

| | |
|---|---|
| *Super-types:* | BasicData < TrafficData (by extension) < **TrafficHeadway** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficHeadway |
| **Abstract** | no |
| **Documentation** | Averaged measurements or calculations of traffic headway, i.e. the distance or time interval between vehicles. This is measured one end (normally the front) of one vehicle to the same end of the following vehicle. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
   <roa:averageDistanceHeadway> com:FloatingPointMetreDistanceValue
   </roa:averageDistanceHeadway> [0..1] ?
   <roa:averageTimeHeadway> roa:DurationValue </roa:averageTimeHeadway> [0..1]
    ?
   <roa:_trafficHeadwayExtension> com:_ExtensionType
   </roa:_trafficHeadwayExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficHeadway">
   <xs:complexContent>
      <xs:extension base="roa:TrafficData">
         <xs:sequence>
            <xs:element name="averageDistanceHeadway"
            type="com:FloatingPointMetreDistanceValue" minOccurs="0"/>
            <xs:element name="averageTimeHeadway" type="roa:DurationValue"
            minOccurs="0"/>
            <xs:element name="_trafficHeadwayExtension"
            type="com:_ExtensionType" minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: TrafficSpeed

| | |
|---|---|
| *Super-types:* | BasicData < TrafficData (by extension) < **TrafficSpeed** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | TrafficSpeed |
| **Abstract** | no |
| **Documentation** | Averaged measurements or calculations of traffic speed. |

**XML Instance Representation**

```
<...>
   <roa:measurementOrCalculationTime> roa:MeasurementOrCalculationTime
   </roa:measurementOrCalculationTime> [0..1] ?
   <roa:_basicDataExtension> com:_ExtensionType </roa:_basicDataExtension>
   [0..1]
   <roa:forVehiclesWithCharacteristicsOf> com:VehicleCharacteristics
   </roa:forVehiclesWithCharacteristicsOf> [0..1] ?
   <roa:_trafficDataExtension> com:_ExtensionType </roa:_trafficDataExtension>
   [0..1]
   <roa:averageVehicleSpeed> com:SpeedValue </roa:averageVehicleSpeed> [0..1]
   ?
   <roa:speedPercentile> roa:SpeedPercentile </roa:speedPercentile> [0..*]
   <roa:normallyExpectedSpeed> com:SpeedValue </roa:normallyExpectedSpeed>
   [0..1] ?
   <roa:minimumSpeed> com:SpeedValue </roa:minimumSpeed> [0..1] ?
   <roa:maximumSpeed> com:SpeedValue </roa:maximumSpeed> [0..1] ?
   <roa:_trafficSpeedExtension> com:_ExtensionType
   </roa:_trafficSpeedExtension> [0..1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="TrafficSpeed">
   <xs:complexContent>
      <xs:extension base="roa:TrafficData">
         <xs:sequence>
            <xs:element name="averageVehicleSpeed" type="com:SpeedValue"
            minOccurs="0"/>
            <xs:element name="speedPercentile" type="roa:SpeedPercentile"
            minOccurs="0" maxOccurs="unbounded"/>
            <xs:element name="normallyExpectedSpeed" type="com:SpeedValue"
            minOccurs="0"/>
            <xs:element name="minimumSpeed" type="com:SpeedValue"
            minOccurs="0"/>
            <xs:element name="maximumSpeed" type="com:SpeedValue"
            minOccurs="0"/>
            <xs:element name="_trafficSpeedExtension" type="com:_ExtensionType"
            minOccurs="0"/>
         </xs:sequence>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

---

## Complex Type: _MeasuredOrDerivedDataTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < MeasuredOrDerivedDataTypeEnum (by restriction) < **_MeasuredOrDerivedDataTypeEnum** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _MeasuredOrDerivedDataTypeEnum |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   roa:MeasuredOrDerivedDataTypeEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_MeasuredOrDerivedDataTypeEnum">
```

```
   <xs:simpleContent>
      <xs:extension base="roa:MeasuredOrDerivedDataTypeEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Complex Type: _MeasurementSiteIndexMeasurementSpecificCharacteristics

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

**Name** _MeasurementSiteIndexMeasurementSpecificCharacteristics

**Abstract** no

**XML Instance Representation**

```
<...
 index="xs:int [1]">
   <roa:measurementSpecificCharacteristics>
   roa:MeasurementSpecificCharacteristics
   </roa:measurementSpecificCharacteristics> [1]
</...>
```

**Schema Component Representation**

```
<xs:complexType
name="_MeasurementSiteIndexMeasurementSpecificCharacteristics">
   <xs:sequence>
      <xs:element name="measurementSpecificCharacteristics"
      type="roa:MeasurementSpecificCharacteristics" minOccurs="1"
      maxOccurs="1"/>
   </xs:sequence>
   <xs:attribute name="index" type="xs:int" use="required"/>
</xs:complexType>
```

top

## Complex Type: _MeasurementSiteTableVersionedReference

| | |
|---|---|
| *Super-types:* | com:VersionedReference < **_MeasurementSiteTableVersionedReference** (by extension) |
| *Sub-types:* | None |

**Name** _MeasurementSiteTableVersionedReference

**Abstract** no

**XML Instance Representation**

```
<...
 targetClass="roa:MeasurementSiteTable [1]">
   <!-- 'com:VersionedReference' super type was not found in this schema. Some
   elements and attributes may be missing. -->
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_MeasurementSiteTableVersionedReference">
   <xs:complexContent>
      <xs:extension base="com:VersionedReference">
```

```
        <xs:attribute name="targetClass" type="xs:string" use="required"
        fixed="roa:MeasurementSiteTable"/>
      </xs:extension>
    </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _MeasurementSiteVersionedReference

| | |
|---|---|
| *Super-types:* | com:VersionedReference < **_MeasurementSiteVersionedReference** (by extension) |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _MeasurementSiteVersionedReference |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 targetClass="roa:MeasurementSite [1]">
   <!-- 'com:VersionedReference' super type was not found in this schema. Some
   elements and attributes may be missing. -->
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_MeasurementSiteVersionedReference">
   <xs:complexContent>
      <xs:extension base="com:VersionedReference">
         <xs:attribute name="targetClass" type="xs:string" use="required"
         fixed="roa:MeasurementSite"/>
      </xs:extension>
   </xs:complexContent>
</xs:complexType>
```

top

## Complex Type: _SiteMeasurementsIndexPhysicalQuantity

| | |
|---|---|
| *Super-types:* | None |
| *Sub-types:* | None |

| | |
|---|---|
| **Name** | _SiteMeasurementsIndexPhysicalQuantity |
| **Abstract** | no |

**XML Instance Representation**

```
<...
 index="xs:int [1]">
   <roa:physicalQuantity> roa:PhysicalQuantity </roa:physicalQuantity> [1]
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_SiteMeasurementsIndexPhysicalQuantity">
   <xs:sequence>
      <xs:element name="physicalQuantity" type="roa:PhysicalQuantity"
      minOccurs="1" maxOccurs="1"/>
   </xs:sequence>
   <xs:attribute name="index" type="xs:int" use="required"/>
</xs:complexType>
```

top

## Complex Type: _TimeMeaningEnum

| | |
|---|---|
| *Super-types:* | xs:string < TimeMeaningEnum (by restriction) < **_TimeMeaningEnum** (by extension) |
| *Sub-types:* | None |

**Name** _TimeMeaningEnum

**Abstract** no

**XML Instance Representation**

```
<...
 _extendedValue="xs:string [0..1]">
   roa:TimeMeaningEnum
</...>
```

**Schema Component Representation**

```
<xs:complexType name="_TimeMeaningEnum">
   <xs:simpleContent>
      <xs:extension base="roa:TimeMeaningEnum">
         <xs:attribute name="_extendedValue" type="xs:string"/>
      </xs:extension>
   </xs:simpleContent>
</xs:complexType>
```

top

## Simple Type: DensityVehiclesPerKilometre

| | |
|---|---|
| *Super-types:* | com:NonNegativeInteger < **DensityVehiclesPerKilometre** (by restriction) |
| *Sub-types:* | None |

**Name** DensityVehiclesPerKilometre

**Content**

- **'NonNegativeInteger' super type was not found in this schema. Its facets could not be printed out.**

**Documentation** A measure of traffic density defined in number of vehicles per kilometre of road.

**Schema Component Representation**

```
<xs:simpleType name="DensityVehiclesPerKilometre">
   <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top

## Simple Type: MeasuredOrDerivedDataTypeEnum

| | |
|---|---|
| *Super-types:* | xs:string < **MeasuredOrDerivedDataTypeEnum** (by restriction) |
| *Sub-types:* | • _MeasuredOrDerivedDataTypeEnum (by extension) |

**Name** MeasuredOrDerivedDataTypeEnum

**Content**

- Base XSD Type: string

- *value* comes from list: {'trafficConcentration'|'trafficFlow'|'trafficGap'|'trafficHeadway'|'trafficSpeed'|'_extended'}

**Documentation** Types of measured or derived data.

**Schema Component Representation**

```
<xs:simpleType name="MeasuredOrDerivedDataTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="trafficConcentration"/>
    <xs:enumeration value="trafficFlow"/>
    <xs:enumeration value="trafficGap"/>
    <xs:enumeration value="trafficHeadway"/>
    <xs:enumeration value="trafficSpeed"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

top

## Simple Type: PassengerCarUnitsPerHour

| | |
|---|---|
| *Super-types:* | com:NonNegativeInteger < **PassengerCarUnitsPerHour** (by restriction) |
| *Sub-types:* | None |

**Name** PassengerCarUnitsPerHour

**Content**

- **'NonNegativeInteger' super type was not found in this schema. Its facets could not be printed out.**

**Documentation** Passenger car units per hour.

**Schema Component Representation**

```
<xs:simpleType name="PassengerCarUnitsPerHour">
  <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top

## Simple Type: TimeMeaningEnum

| | |
|---|---|
| *Super-types:* | xs:string < **TimeMeaningEnum** (by restriction) |
| *Sub-types:* | _TimeMeaningEnum (by extension) |

**Name** TimeMeaningEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'beginTime'|'endTime'|'middleTime'|'_extended'}

**Documentation** Explains the meaning of a specific time value with respect to a time period

**Schema Component Representation**

```
<xs:simpleType name="TimeMeaningEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="beginTime"/>
    <xs:enumeration value="endTime"/>
    <xs:enumeration value="middleTime"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
```

```
</xs:simpleType>
```

top

## Simple Type: VehiclesPerDay

| | |
|---|---|
| *Super-types:* | com:NonNegativeInteger < **VehiclesPerDay** (by restriction) |
| *Sub-types:* | None |

**Name** VehiclesPerDay

**Content**

- **'NonNegativeInteger' super type was not found in this schema. Its facets could not be printed out.**

**Documentation** A rate of vehicle flow in units of vehicles per day

**Schema Component Representation**

```
<xs:simpleType name="VehiclesPerDay">
  <xs:restriction base="com:NonNegativeInteger"/>
</xs:simpleType>
```

top