

Realis ITS

Version 06.12.2022

# DatexII 3.3 profile realiscameras-3.0

# DATEXII\_3\_Common

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## Schema Document Properties

|                                         |                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Namespace</b>                 | <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a>                                                                                                                                                                                                                        |
| <b>Version</b>                          | 3.3                                                                                                                                                                                                                                                                                                    |
| <b>Element and Attribute Namespaces</b> | <ul style="list-style-type: none"><li>• Global element and attribute declarations belong to this schema's target namespace.</li><li>• By default, local element declarations belong to this schema's target namespace.</li><li>• By default, local attribute declarations have no namespace.</li></ul> |

## Declared Namespaces

| Prefix | Namespace                                                                               |
|--------|-----------------------------------------------------------------------------------------|
| xml    | <a href="http://www.w3.org/XML/1998/namespace">http://www.w3.org/XML/1998/namespace</a> |
| xs     | <a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>         |
| com    | <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a>         |

### Schema Component Representation

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" version="3.3"
targetNamespace="http://datex2.eu/schema/3/common">
  ...
</xs:schema>
```

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## Global Definitions

### Complex Type: **HeaderInformation**

|                     |      |
|---------------------|------|
| <i>Super-types:</i> | None |
| <i>Sub-types:</i>   | None |

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| <b>Name</b>          | HeaderInformation                                                           |
| <b>Abstract</b>      | no                                                                          |
| <b>Documentation</b> | 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>
```

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### Complex Type: InternationalIdentifier

|                     |      |
|---------------------|------|
| <i>Super-types:</i> | None |
| <i>Sub-types:</i>   | None |

|                      |                                                                       |
|----------------------|-----------------------------------------------------------------------|
| <b>Name</b>          | InternationalIdentifier                                               |
| <b>Abstract</b>      | no                                                                    |
| <b>Documentation</b> | 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>
```

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### Complex Type: MultilingualString

|                     |      |
|---------------------|------|
| <i>Super-types:</i> | None |
| <i>Sub-types:</i>   | None |

|                 |                    |
|-----------------|--------------------|
| <b>Name</b>     | MultilingualString |
| <b>Abstract</b> | 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>

```

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### Complex Type: MultilingualStringValue

**Super-types:** [xs:string](#) < [MultilingualStringValue](#) (by restriction) < **MultilingualStringValue** (by extension)

**Sub-types:** None

**Name** MultilingualStringValue

**Abstract** no

#### XML Instance Representation

```

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

```

#### Schema Component Representation

```

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

```

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### 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>

```

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## Complex Type: **PayloadPublication**

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

|                 |                                                                                                                                                                               |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name            | PayloadPublication                                                                                                                                                            |
| <b>Abstract</b> | 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>
```

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## Complex Type: **Reference**

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

|                 |           |
|-----------------|-----------|
| Name            | Reference |
| <b>Abstract</b> | 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>
```

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## Complex Type: **VersionedReference**

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

|                 |                    |
|-----------------|--------------------|
| Name            | VersionedReference |
| <b>Abstract</b> | 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>
```

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Complex Type: **\_ConfidentialityValueEnum**

|              |                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">xs:string</a> < <a href="#">ConfidentialityValueEnum</a> (by restriction) < <b>_ConfidentialityValueEnum</b> (by extension) |
| Sub-types:   | None                                                                                                                                    |

|                 |                           |
|-----------------|---------------------------|
| Name            | _ConfidentialityValueEnum |
| <b>Abstract</b> | 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>
```

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Complex Type: **\_ExtensionType**

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

|                 |                |
|-----------------|----------------|
| Name            | _ExtensionType |
| <b>Abstract</b> | 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>
```

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Complex Type: **\_InformationDeliveryServicesEnum**

|              |                                                                                                                                                       |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">xs:string</a> < <a href="#">InformationDeliveryServicesEnum</a> (by restriction) < <b>_InformationDeliveryServicesEnum</b> (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>
```

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### 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>
```

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### Simple Type: `AngleInDegrees`

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

Sub-types: None

Name `AngleInDegrees`

Content

- Base XSD Type: `nonNegativeInteger`
- $0 \leq \text{value} \leq 359$

**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>
```

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## 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>
```

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## 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>
```

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## 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>
```

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## 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>
```

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## Simple Type: **Float**

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

*Sub-types:*

- [MetresAsFloat](#) (by restriction)
- [Percentage](#) (by restriction)

**Name** Float

**Content**

- Base XSD Type: float

**Documentation**

A floating point number whose value space consists of the values  $m \times 2^e$ , 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>
```

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## 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>
```

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## 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>
```

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## 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>
```

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## 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>
```

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## Simple Type: **LongString**

*Super-types:* [xs:string](#) < **LongString** (by restriction)

*Sub-types:* None

|                      |                                                                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | LongString                                                                                                                                                                                                                                           |
| <b>Content</b>       | <ul style="list-style-type: none"> <li>Base XSD Type: string</li> </ul>                                                                                                                                                                              |
| <b>Documentation</b> | 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>
```

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## Simple Type: MetresAsFloat

**Super-types:** [xs:float](#) < [Float](#) (by restriction) < **MetresAsFloat** (by restriction)

**Sub-types:** None

|                      |                                                                        |
|----------------------|------------------------------------------------------------------------|
| <b>Name</b>          | MetresAsFloat                                                          |
| <b>Content</b>       | <ul style="list-style-type: none"> <li>Base XSD Type: float</li> </ul> |
| <b>Documentation</b> | 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>
```

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## Simple Type: MetresAsNonNegativeInteger

**Super-types:** [xs:nonNegativeInteger](#) < [NonNegativeInteger](#) (by restriction) < **MetresAsNonNegativeInteger** (by restriction)

**Sub-types:** None

|                      |                                                                                     |
|----------------------|-------------------------------------------------------------------------------------|
| <b>Name</b>          | MetresAsNonNegativeInteger                                                          |
| <b>Content</b>       | <ul style="list-style-type: none"> <li>Base XSD Type: nonNegativeInteger</li> </ul> |
| <b>Documentation</b> | 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>
```

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## Simple Type: MultilingualStringValue

**Super-types:** [xs:string](#) < **MultilingualStringValue** (by restriction)

**Sub-types:**

- [MultilingualStringValue](#) (by extension)

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| <b>Name</b>    | MultilingualStringValue                                                                            |
| <b>Content</b> | <ul style="list-style-type: none"> <li>Base XSD Type: string</li> <li>length &lt;= 1024</li> </ul> |

#### Schema Component Representation

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

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

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## Simple Type: **NonNegativeInteger**

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

*Sub-types:*

- [AngleInDegrees](#) (by restriction)
- [MetresAsNonNegativeInteger](#) (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>
```

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## 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>
```

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## 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>
```

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## Simple Type: **Url**

*Super-types:* [xs:anyURI](#) < **Url** (by restriction)

*Sub-types:* None

**Name** Url

**Content**

- Base XSD Type: anyURI

**Documentation** A Uniform Resource Locator (URL) address comprising a compact string of characters for a resource available on the Internet.

### Schema Component Representation

```
<xs:simpleType name="Url">
  <xs:restriction base="xs:anyURI" />
</xs:simpleType>
```

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# DATEXII\_3\_D2Payload

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## Schema Document Properties

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Namespace</b>                 | <a href="http://datex2.eu/schema/3/d2Payload">http://datex2.eu/schema/3/d2Payload</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Version</b>                          | 3.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Element and Attribute Namespaces</b> | <ul style="list-style-type: none"><li>• Global element and attribute declarations belong to this schema's target namespace.</li><li>• By default, local element declarations belong to this schema's target namespace.</li><li>• By default, local attribute declarations have no namespace.</li></ul>                                                                                                                                                                                                                                                                                                        |
| <b>Schema Composition</b>               | <ul style="list-style-type: none"><li>• This schema imports schema(s) from the following namespace(s):<ul style="list-style-type: none"><li>◦ <a href="http://datex2.eu/schema/3/trafficCamerasExtension">http://datex2.eu/schema/3/trafficCamerasExtension</a> (at DATEXII_3_TrafficCamerasExtension.xsd)</li><li>◦ <a href="http://datex2.eu/schema/3/locationReferencing">http://datex2.eu/schema/3/locationReferencing</a> (at DATEXII_3_LocationReferencing.xsd)</li><li>◦ <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a> (at DATEXII_3_Common.xsd)</li></ul></li></ul> |

## Declared Namespaces

| Prefix                  | Namespace                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|
| xml                     | <a href="http://www.w3.org/XML/1998/namespace">http://www.w3.org/XML/1998/namespace</a>                           |
| xs                      | <a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>                                   |
| trafficCamerasExtension | <a href="http://datex2.eu/schema/3/trafficCamerasExtension">http://datex2.eu/schema/3/trafficCamerasExtension</a> |
| loc                     | <a href="http://datex2.eu/schema/3/locationReferencing">http://datex2.eu/schema/3/locationReferencing</a>         |
| com                     | <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a>                                   |
| d2                      | <a href="http://datex2.eu/schema/3/d2Payload">http://datex2.eu/schema/3/d2Payload</a>                             |

## 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/trafficCamerasExtension"
schemaLocation="DATEXII_3_TrafficCamerasExtension.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>
```

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## Global Declarations

Element: **payload**

|                        |                                        |
|------------------------|----------------------------------------|
| <b>Name</b>            | payload                                |
| <b>Type</b>            | <a href="#">com:PayloadPublication</a> |
| <b><u>Nilable</u></b>  | no                                     |
| <b><u>Abstract</u></b> | no                                     |

#### XML Instance Representation

```

<d2:payload> com:PayloadPublication
  <!--
    Uniqueness Constraint - \_payloadPredefinedLocationConstraint
    Selector - .//loc:predefinedLocation
    Field(s) - @id, @version
  -->
</d2:payload>

```

#### Schema Component Representation

```

<xs:element name="payload" type="com:PayloadPublication

```

# DATEXII\_3\_LocationReferencing

---

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  - [Complex Type: OpenlrAreaLocationReference](#)
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  - [Complex Type: OpenlrCircleLocationReference](#)
  - [Complex Type: OpenlrClosedLineLocationReference](#)
  - [Complex Type: OpenlrGeoCoordinate](#)
  - [Complex Type: OpenlrGridLocationReference](#)
  - [Complex Type: OpenlrLastLocationReferencePoint](#)
  - [Complex Type: OpenlrLineAttributes](#)
  - [Complex Type: OpenlrLineLocationReference](#)
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  - [Complex Type: OpenlrOffsets](#)
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  - [Complex Type: OpenlrPolygonCorners](#)
  - [Complex Type: OpenlrPolygonLocationReference](#)
  - [Complex Type: OpenlrRectangle](#)
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  - [Complex Type: PercentageDistanceAlongLinearElement](#)
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## 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.
- By default, local element declarations belong to this schema's target namespace.
- By default, local attribute declarations have no namespace.

### Schema Composition

- This schema imports schema(s) from the following namespace(s):
  - <http://datex2.eu/schema/3/trafficCamerasExtension> (at DATEXII\_3\_TrafficCamerasExtension.xsd)
  - <http://datex2.eu/schema/3/common> (at DATEXII\_3\_Common.xsd)

## Declared Namespaces

| Prefix                  | Namespace                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------|
| xml                     | <a href="http://www.w3.org/XML/1998/namespace">http://www.w3.org/XML/1998/namespace</a>                           |
| xs                      | <a href="http://www.w3.org/2001/XMLSchema">http://www.w3.org/2001/XMLSchema</a>                                   |
| trafficCamerasExtension | <a href="http://datex2.eu/schema/3/trafficCamerasExtension">http://datex2.eu/schema/3/trafficCamerasExtension</a> |
| com                     | <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a>                                   |
| loc                     | <a href="http://datex2.eu/schema/3/locationReferencing">http://datex2.eu/schema/3/locationReferencing</a>         |

## 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/trafficCamerasExtension"
    schemaLocation="DATEXII_3_TrafficCamerasExtension.xsd"/>
  <xs:import namespace="http://datex2.eu/schema/3/common" schemaLocation="DATEXII_3_Common.xsd"/>
  ...
</xs:schema>
```

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## Global Definitions

### Complex Type: AlertCArea

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

|                 |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Name            | AlertCArea                                                           |
| <u>Abstract</u> | 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>
```

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### Complex Type: AlertCDirection

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

|                 |                                                                                |
|-----------------|--------------------------------------------------------------------------------|
| Name            | AlertCDirection                                                                |
| <u>Abstract</u> | 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>
```

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### Complex Type: AlertCLinear

|              |                                                                                                                                                                                                                         |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | None                                                                                                                                                                                                                    |
| Sub-types:   | <ul style="list-style-type: none"><li><a href="#">AlertCLinearByCode</a> (by extension)</li><li><a href="#">AlertCMethod2Linear</a> (by extension)</li><li><a href="#">AlertCMethod4Linear</a> (by extension)</li></ul> |

|                 |                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------|
| Name            | AlertCLinear                                                                                                               |
| <u>Abstract</u> | 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>
```

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### 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>
```

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### 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>
```

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### Complex Type: AlertCMethod2Linear

Super-types: [AlertCLinear](#) < AlertCMethod2Linear (by extension)

Sub-types: None

|                      |                                                                                                                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | AlertCMethod2Linear                                                                                                                                                                                                                                   |
| <b>Abstract</b>      | no                                                                                                                                                                                                                                                    |
| <b>Documentation</b> | 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>
```

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### Complex Type: AlertCMethod2Point

|                     |                                                                 |
|---------------------|-----------------------------------------------------------------|
| <b>Super-types:</b> | <a href="#">AlertCPoint</a> < AlertCMethod2Point (by extension) |
| <b>Sub-types:</b>   | None                                                            |

|                      |                                                                                                                                                                   |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | AlertCMethod2Point                                                                                                                                                |
| <b>Abstract</b>      | no                                                                                                                                                                |
| <b>Documentation</b> | 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>
```

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### Complex Type: AlertCMethod2PrimaryPointLocation

|                     |      |
|---------------------|------|
| <b>Super-types:</b> | None |
| <b>Sub-types:</b>   | None |

|                      |                                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | AlertCMethod2PrimaryPointLocation                                                                                                                                                                            |
| <b>Abstract</b>      | no                                                                                                                                                                                                           |
| <b>Documentation</b> | 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:alertCDirection> loc:AlertCDirection </loc:alertCDirection> [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="alertCDirection" type="loc:AlertCDirection"/>
        <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>
```

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### Complex Type: AlertCMethod4Point

Super-types: [AlertCPoint](#) < AlertCMethod4Point (by extension)  
Sub-types: None

**Name** AlertCMethod4Point  
**Abstract** no

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>
```

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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>
```

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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:alertCLocation> loc:AlertCLocation </loc:alertCLocation> [1]
  <loc:offsetDistance> loc:OffsetDistance </loc:offsetDistance> [1]
  <loc: alertCMethod4SecondaryPointLocationExtension> com: ExtensionType
</loc: _alertCMethod4SecondaryPointLocationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="AlertCMethod4SecondaryPointLocation">
  <xs:sequence>
    <xs:element name="alertCLocation" type="loc:AlertCLocation"/>
    <xs:element name="offsetDistance" type="loc:OffsetDistance"/>
    <xs:element name="_alertCMethod4SecondaryPointLocationExtension" type="com: _ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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## Complex Type: AlertCPoint

Super-types: None

Sub-types:

- [AlertCMethod2Point](#) (by extension)
- [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>
```

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## 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>
```

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## 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>
```



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

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## 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> com:_ExtensionType </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>
```

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## 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>
```

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## Complex Type: **Destination**

Super-types: None

Sub-types:

- [AreaDestination](#) (by extension)
- [PointDestination](#) (by extension)

Name Destination

**Abstract** yes



## 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)
- [DistanceFromLinearElementStart](#) (by extension)
- [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>
```

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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>
```

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Complex Type: GmlLineString

|              |                                                                                              |
|--------------|----------------------------------------------------------------------------------------------|
| Super-types: | None                                                                                         |
| Sub-types:   | <ul style="list-style-type: none"><li><a href="#">GmlLinearRing</a> (by extension)</li></ul> |

|               |                                                                                                                                                                                                                                                          |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>
```

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**Complex Type: GmlMultiPolygon**

Super-types: None  
Sub-types: None

**Name** GmlMultiPolygon  
**Abstract** no  
**Documentation** An area defined by a set of polygons according 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>
```

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**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>
```

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**Complex Type: HeightCoordinate**

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

|                 |                                                  |
|-----------------|--------------------------------------------------|
| Name            | HeightCoordinate                                 |
| <b>Abstract</b> | 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 < <a href="#">NamedArea</a> (by extension) < <b>IsoNamedArea</b> (by extension) |
| Sub-types:   | None                                                                                      |

|                 |                                                   |
|-----------------|---------------------------------------------------|
| Name            | IsoNamedArea                                      |
| <b>Abstract</b> | 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> com:_ExtensionType </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>
```

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### Complex Type: **Lane**

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

|                 |                                              |
|-----------------|----------------------------------------------|
| Name            | Lane                                         |
| <b>Abstract</b> | 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:sequence>
</xs:complexType>
```

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

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## 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>
```

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## 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>
```

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### 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>
```

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### 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> com:_ExtensionType </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:secondarySupplementaryDescription> loc:SupplementaryPositionalDescription
</loc:secondarySupplementaryDescription> [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="secondarySupplementaryDescription" type="loc:SupplementaryPositionalDescription"
          minOccurs="0"/>
        <xs:element name="_linearLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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### 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>

```

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### Complex Type: **Location**

Super-types: [LocationReference](#) < **Location** (by extension)

Sub-types:

- [AreaLocation](#) (by extension)
- [LocationByReference](#) (by extension)
- [NetworkLocation](#) (by extension)
  - [LinearLocation](#) (by extension)
    - [SingleRoadLinearLocation](#) (by extension)
  - [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> com:_ExtensionType </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>

```

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## 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> com:_ExtensionType </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>

```

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## Complex Type: LocationReference

Super-types: None

Sub-types:

- [Location](#) (by extension)
  - [AreaLocation](#) (by extension)
  - [LocationByReference](#) (by extension)
  - [NetworkLocation](#) (by extension)
    - [LinearLocation](#) (by extension)
      - [SingleRoadLinearLocation](#) (by extension)
    - [PointLocation](#) (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> com:_ExtensionType </loc:_locationReferenceExtension> [0..1]
</...>

```

### Schema Component Representation

```

<xs:complexType name="LocationReference" abstract="true">
  <xs:sequence>
    <xs:element name="_locationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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## Complex Type: NamedArea

Super-types: NamedArea < **NamedArea** (by extension)

Sub-types:

- [IsoNamedArea](#) (by extension)
- [NamedArea](#) (by extension)
- [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> com:_ExtensionType </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="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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## Complex Type: NetworkLocation

Super-types: [LocationReference](#) < [Location](#) (by extension) < **NetworkLocation** (by extension)

Sub-types:

- [LinearLocation](#) (by extension)
  - [SingleRoadLinearLocation](#) (by extension)
- [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> com:_ExtensionType </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>
```

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## 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> com:_ExtensionType </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>
```

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Complex Type: **OffsetDistance**

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

|                 |                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------|
| Name            | OffsetDistance                                                                          |
| <b>Abstract</b> | 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>
```

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Complex Type: **OpenlrAreaLocationReference**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | None                                                                                                                                                                                                                                                                                                                                                                                                             |
| Sub-types:   | <ul style="list-style-type: none"><li>• <a href="#">OpenlrCircleLocationReference</a> (by extension)</li><li>• <a href="#">OpenlrClosedLineLocationReference</a> (by extension)</li><li>• <a href="#">OpenlrGridLocationReference</a> (by extension)</li><li>• <a href="#">OpenlrPolygonLocationReference</a> (by extension)</li><li>• <a href="#">OpenlrRectangleLocationReference</a> (by extension)</li></ul> |

|                 |                                                                                                                                                                                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name            | OpenlrAreaLocationReference                                                                                                                                                                                                                         |
| <b>Abstract</b> | 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>
```

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Complex Type: **OpenlrBasePointLocation**

|              |                                                                                                                                                                         |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">OpenlrPointLocationReference</a> < <b>OpenlrBasePointLocation</b> (by extension)                                                                            |
| Sub-types:   | <ul style="list-style-type: none"><li>• <a href="#">OpenlrPointAlongLine</a> (by extension)</li><li>• <a href="#">OpenlrPoiWithAccessPoint</a> (by extension)</li></ul> |

|                 |                                                                                          |
|-----------------|------------------------------------------------------------------------------------------|
| Name            | OpenlrBasePointLocation                                                                  |
| <b>Abstract</b> | 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)
- [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

|                      |                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------|
| <b>Name</b>          | OpenlrLastLocationReferencePoint                                                            |
| <b>Abstract</b>      | no                                                                                          |
| <b>Documentation</b> | 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

|                      |                                                                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | OpenlrLineAttributes                                                                                                                          |
| <b>Abstract</b>      | no                                                                                                                                            |
| <b>Documentation</b> | 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

|                      |                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | OpenlrLineLocationReference                                                                                                               |
| <b>Abstract</b>      | no                                                                                                                                        |
| <b>Documentation</b> | 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

## 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: | <a href="#">OpenlrPointLocationReference</a> < <a href="#">OpenlrBasePointLocation</a> (by extension) < <b>OpenlrPointAlongLine</b> (by extension) |
| Sub-types:   | None                                                                                                                                               |

|                 |                      |
|-----------------|----------------------|
| Name            | OpenlrPointAlongLine |
| <b>Abstract</b> | 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:   | <ul style="list-style-type: none"><li>• <a href="#">OpenlrBasePointLocation</a> (by extension)<ul style="list-style-type: none"><li>◦ <a href="#">OpenlrPointAlongLine</a> (by extension)</li><li>◦ <a href="#">OpenlrPoiWithAccessPoint</a> (by extension)</li></ul></li><li>• <a href="#">OpenlrGeoCoordinate</a> (by extension)</li></ul> |

|                 |                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------|
| Name            | OpenlrPointLocationReference                                                                 |
| <b>Abstract</b> | 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                                                                         |
| <b>Abstract</b> | 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" maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>

```

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## 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>
```

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### 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>
```

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### Complex Type: PointDestination

|              |                                                               |
|--------------|---------------------------------------------------------------|
| Super-types: | <a href="#">Destination</a> < 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>
```

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### Complex Type: PointLocation

|              |                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">LocationReference</a> < <a href="#">Location</a> (by extension) < <a href="#">NetworkLocation</a> (by extension) < <a href="#">PointLocation</a> (by extension) |
| Sub-types:   | None                                                                                                                                                                        |

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

XML Instance Representation

```
<...>
  <loc:locationReferenceExtension> com:_ExtensionType </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>
```

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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>
```

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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>

```

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### Complex Type: **PredefinedLocation**

Super-types: [PredefinedLocationReference](#) < PredefinedLocation (by extension)

Sub-types: None

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| <b>Name</b>          | PredefinedLocation                                                  |
| <b>Abstract</b>      | no                                                                  |
| <b>Documentation</b> | An identifiable versioned instance of a single predefined location. |

#### XML Instance Representation

```

<...
  id="xs:string [1]"
  version="xs:string [1]">
    <loc:_predefinedLocationReferenceExtension> com:_ExtensionType </loc:_predefinedLocationReferenceExtension> [0..1]
    <loc:predefinedLocationName> com:MultilingualString </loc:predefinedLocationName> [0..1] ?
    <loc:location> loc:Location </loc:location> [1]
    <loc:_predefinedLocationExtension> loc:_PredefinedLocationExtensionType </loc:_predefinedLocationExtension> [0..1]
  </...>

```

#### Schema Component Representation

```

<xs:complexType name="PredefinedLocation">
  <xs:complexContent>
    <xs:extension base="loc:PredefinedLocationReference">
      <xs:sequence>
        <xs:element name="predefinedLocationName" type="com:MultilingualString" minOccurs="0" maxOccurs="1"/>
        <xs:element name="location" type="loc:Location"/>
        <xs:element name="_predefinedLocationExtension" type="loc:_PredefinedLocationExtensionType" minOccurs="0"/>
      </xs:sequence>
      <xs:attribute name="id" type="xs:string" use="required"/>
      <xs:attribute name="version" type="xs:string" use="required"/>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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### Complex Type: **PredefinedLocationReference**

Super-types: None

Sub-types: 

- [PredefinedLocation](#) (by extension)

|                      |                                                                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | PredefinedLocationReference                                                                                                                |
| <b>Abstract</b>      | yes                                                                                                                                        |
| <b>Documentation</b> | A location reference which is predefined and may be realised by a predefined itinerary, non-ordered group of locations or single location. |

#### XML Instance Representation

```

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

```

#### Schema Component Representation

```

<xs:complexType name="PredefinedLocationReference" abstract="true">
  <xs:sequence>
    <xs:element name="_predefinedLocationReferenceExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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### Complex Type: **PredefinedLocationsPublication**

Super-types: [com:PayloadPublication](#) < PredefinedLocationsPublication (by extension)

Sub-types: None

|                      |                                                                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | PredefinedLocationsPublication                                                                                                                      |
| <b>Abstract</b>      | no                                                                                                                                                  |
| <b>Documentation</b> | A publication containing one or more groups of predefined locations organised either as itineraries, non-ordered groups or as individual locations. |

#### XML Instance Representation

```
<...>
<!-- 'com:PayloadPublication' super type was not found in this schema. Some elements and attributes may be missing. -->
<loc:headerInformation> com:HeaderInformation </loc:headerInformation> [1]
<loc:predefinedLocationReference> loc:PredefinedLocationReference </loc:predefinedLocationReference> [1..*]
<loc:_predefinedLocationsPublicationExtension> com:_ExtensionType </loc:_predefinedLocationsPublicationExtension> [0..1]
</...>
```

#### Schema Component Representation

```
<xs:complexType name="PredefinedLocationsPublication">
  <xs:complexContent>
    <xs:extension base="com:PayloadPublication">
      <xs:sequence>
        <xs:element name="headerInformation" type="com:HeaderInformation"/>
        <xs:element name="predefinedLocationReference" type="loc:PredefinedLocationReference" maxOccurs="unbounded"/>
        <xs:element name="_predefinedLocationsPublicationExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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### Complex Type: Referent

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

|                      |                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | Referent                                                                                                                              |
| <b>Abstract</b>      | no                                                                                                                                    |
| <b>Documentation</b> | 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>
```

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### Complex Type: RoadInformation

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

|                      |                       |
|----------------------|-----------------------|
| <b>Name</b>          | RoadInformation       |
| <b>Abstract</b>      | no                    |
| <b>Documentation</b> | 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:sequence>
</xs:complexType>
```

```

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

```

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## Complex Type: **SingleRoadLinearLocation**

**Super-types:** [LocationReference](#) < [Location](#) (by extension) < [NetworkLocation](#) (by extension) < [LinearLocation](#) (by extension) < **SingleRoadLinearLocation** (by extension)

**Sub-types:** None

|                      |                                                                                                                                                                                                                                                    |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>          | SingleRoadLinearLocation                                                                                                                                                                                                                           |
| <b>Abstract</b>      | no                                                                                                                                                                                                                                                 |
| <b>Documentation</b> | 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> com:_ExtensionType </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:secondarySupplementaryDescription> loc:SupplementaryPositionalDescription
</loc:secondarySupplementaryDescription> [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>

```

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## Complex Type: **SupplementaryPositionalDescription**

**Super-types:** None

**Sub-types:** None

|                      |                                                                                                    |
|----------------------|----------------------------------------------------------------------------------------------------|
| <b>Name</b>          | SupplementaryPositionalDescription                                                                 |
| <b>Abstract</b>      | no                                                                                                 |
| <b>Documentation</b> | 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> com:_ExtensionType
</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:sequence>
</xs:complexType>

```



```

<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="com:_ExtensionType" 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)
- [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)
- [TpegPointDescriptor](#) (by extension)
  - [TpegIlcPointDescriptor](#) (by extension)
  - [TpegJunctionPointDescriptor](#) (by extension)
  - [TpegOtherPointDescriptor](#) (by extension)

**Name** TpegDescriptor  
**Abstract** yes



## XML Instance Representation

```
<...>
  <loc:descriptor> com:MultilingualString </loc:descriptor> [1] ?
  <loc:_tppegDescriptorExtension> com:_ExtensionType </loc:_tppegDescriptorExtension> [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="_tppegDescriptorExtension" 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:tppegDirection> loc:_DirectionEnum </loc:tppegDirection> [1] ?
  <loc:tppegPointLocationExtension> com:_ExtensionType </loc:tppegPointLocationExtension> [0..1]
  <loc:tppegFramedPointLocationType> loc:_TpegLoc01FramedPointLocationSubtypeEnum </loc:tppegFramedPointLocationType> [1] ?
  <loc:framedPoint> loc:TpegNonJunctionPoint </loc:framedPoint> [1] ?
  <loc:to> loc:TpegPoint </loc:to> [1] ?
  <loc:from> loc:TpegPoint </loc:from> [1] ?
  <loc:_tppegFramedPointExtension> com:_ExtensionType </loc:_tppegFramedPointExtension> [0..1]
</...>
```

## Schema Component Representation

```
<xs:complexType name="TpegFramedPoint">
  <xs:complexContent>
    <xs:extension base="loc:TpegPointLocation">
      <xs:sequence>
        <xs:element name="tppegFramedPointLocationType" 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="_tppegFramedPointExtension" 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:tppegAreaLocationType> loc:_TpegLoc01AreaLocationSubtypeEnum </loc:tppegAreaLocationType> [1] ?
  <loc:tppegHeight> loc:TpegHeight </loc:tppegHeight> [0..1]
  <loc:tppegAreaLocationExtension> com:_ExtensionType </loc:tppegAreaLocationExtension> [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:_tppegGeometricAreaExtension> com:_ExtensionType </loc:_tppegGeometricAreaExtension> [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="_tppegGeometricAreaExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```
</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="_tpgJunctionExtension" type="com:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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## 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:_tpgDescriptorExtension> com:_ExtensionType </loc:_tpgDescriptorExtension> [0..1]
  <loc:_tpgPointDescriptorExtension> com:_ExtensionType </loc:_tpgPointDescriptorExtension> [0..1]
  <loc:_tpgJunctionPointDescriptorType> loc:_TpegLoc03JunctionPointDescriptorSubtypeEnum
</loc:_tpgJunctionPointDescriptorType> [1] ?
  <loc:_tpgJunctionPointDescriptorExtension> com:_ExtensionType </loc:_tpgJunctionPointDescriptorExtension> [0..1]
</...>

```

### Schema Component Representation

```

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

```

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## 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:tpgDirection> loc:_DirectionEnum </loc:tpgDirection> [1] ?
  <loc:tpgLinearLocationType> loc:_TpegLoc01LinearLocationSubtypeEnum </loc:tpgLinearLocationType> [1] ?
  <loc:to> loc:TpegPoint </loc:to> [1] ?
  <loc:from> loc:TpegPoint </loc:from> [1] ?
  <loc:_tpgLinearLocationExtension> com:_ExtensionType </loc:_tpgLinearLocationExtension> [0..1]
</...>

```

### Schema Component Representation

```

<xs:complexType name="TpegLinearLocation">
  <xs:sequence>
    <xs:element name="tpgDirection" type="loc:_DirectionEnum" minOccurs="1" maxOccurs="1"/>
    <xs:element name="tpgLinearLocationType" type="loc:_TpegLoc01LinearLocationSubtypeEnum" minOccurs="1"
maxOccurs="1"/>
    <xs:element name="to" type="loc:TpegPoint"/>
    <xs:element name="from" type="loc:TpegPoint"/>
    <xs:element name="_tpgLinearLocationExtension" type="com:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

## Complex Type: TpegNamedOnlyArea

Super-types: [TpegAreaLocation](#) < **TpegNamedOnlyArea** (by extension)

Sub-types: None

|                 |                                       |
|-----------------|---------------------------------------|
| Name            | TpegNamedOnlyArea                     |
| <b>Abstract</b> | 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: | <a href="#">TpegPoint</a> < <a href="#">TpegNonJunctionPoint</a> (by extension) |
| Sub-types:   | None                                                                            |

|                 |                                                                 |
|-----------------|-----------------------------------------------------------------|
| Name            | TpegNonJunctionPoint                                            |
| <b>Abstract</b> | 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: | <a href="#">TpegDescriptor</a> < <a href="#">TpegPointDescriptor</a> (by extension) < <a href="#">TpegOtherPointDescriptor</a> (by extension) |
| Sub-types:   | None                                                                                                                                          |

|                 |                                            |
|-----------------|--------------------------------------------|
| Name            | TpegOtherPointDescriptor                   |
| <b>Abstract</b> | 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>
```

```
</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>
```

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## 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>
```

## 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>
```

## 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>
```

## 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>
```

## 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: [\\_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>
```

## 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>
```

## 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>
```

## Complex Type: **\_PredefinedLocationExtensionType**

Super-types: None  
Sub-types: None

Name [\\_PredefinedLocationExtensionType](#)  
**Abstract** no

### XML Instance Representation

```
<...>  
  <loc:trafficCameraRecord> trafficCamerasExtension:TrafficCameraRecord </loc:trafficCameraRecord> [0..1]  
  Allow any elements from a namespace other than this schema's namespace (lax validation). [0..*]  
</...>
```

### Schema Component Representation

```
<xs:complexType name="_PredefinedLocationExtensionType">  
  <xs:sequence>  
    <xs:element name="trafficCameraRecord" type="trafficCamerasExtension:TrafficCameraRecord" minOccurs="0"/>  
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>  
  </xs:sequence>  
</xs:complexType>
```

## 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: | <a href="#">xs:string</a> < <a href="#">ReferentTypeEnum</a> (by restriction) < <a href="#">_ReferentTypeEnum</a> (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: | <a href="#">xs:string</a> < <a href="#">RelativePositionOnCarriagewayEnum</a> (by restriction) < <a href="#">_RelativePositionOnCarriagewayEnum</a> (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: | <a href="#">xs:string</a> < <a href="#">SubdivisionTypeEnum</a> (by restriction) < <a href="#">_SubdivisionTypeEnum</a> (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: **\_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: | <a href="#">xs:string</a> < <a href="#">_TpegLoc01SimplePointLocationSubtypeEnum</a> (by restriction) < <a href="#">_TpegLoc01SimplePointLocationSubtypeEnum</a> (by extension) |
| Sub-types:   | None                                                                                                                                                                            |

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| Name            | <a href="#">_TpegLoc01SimplePointLocationSubtypeEnum</a> |
| <b>Abstract</b> | no                                                       |

XML Instance Representation

|                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;...   _extendedValue="xs:string [0..1]"&gt;     <a href="#">loc:TpegLoc01SimplePointLocationSubtypeEnum</a>   &lt;/...&gt;</pre> |
|-------------------------------------------------------------------------------------------------------------------------------------------|

Schema Component Representation

|                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;xs:complexType name="<a href="#">_TpegLoc01SimplePointLocationSubtypeEnum</a>"&gt;   &lt;xs:simpleContent&gt;     &lt;xs:extension base="<a href="#">loc:TpegLoc01SimplePointLocationSubtypeEnum</a>"&gt;       &lt;xs:attribute name="_extendedValue" type="xs:string"/&gt;     &lt;/xs:extension&gt;   &lt;/xs:simpleContent&gt; &lt;/xs:complexType&gt;</pre> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

[top](#)

Complex Type: **\_TpegLoc03AreaDescriptorSubtypeEnum**

|              |                                                                                                                                                                       |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">xs:string</a> < <a href="#">_TpegLoc03AreaDescriptorSubtypeEnum</a> (by restriction) < <a href="#">_TpegLoc03AreaDescriptorSubtypeEnum</a> (by extension) |
| Sub-types:   | None                                                                                                                                                                  |

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| Name            | <a href="#">_TpegLoc03AreaDescriptorSubtypeEnum</a> |
| <b>Abstract</b> | no                                                  |

XML Instance Representation

|                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;...   _extendedValue="xs:string [0..1]"&gt;     <a href="#">loc:TpegLoc03AreaDescriptorSubtypeEnum</a>   &lt;/...&gt;</pre> |
|--------------------------------------------------------------------------------------------------------------------------------------|

Schema Component Representation

|                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;xs:complexType name="<a href="#">_TpegLoc03AreaDescriptorSubtypeEnum</a>"&gt;   &lt;xs:simpleContent&gt;     &lt;xs:extension base="<a href="#">loc:TpegLoc03AreaDescriptorSubtypeEnum</a>"&gt;       &lt;xs:attribute name="_extendedValue" type="xs:string"/&gt;     &lt;/xs:extension&gt;   &lt;/xs:simpleContent&gt; &lt;/xs:complexType&gt;</pre> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

[top](#)

Complex Type: **\_TpegLoc03IlcPointDescriptorSubtypeEnum**

|              |                                                                                                                                                                               |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">xs:string</a> < <a href="#">_TpegLoc03IlcPointDescriptorSubtypeEnum</a> (by restriction) < <a href="#">_TpegLoc03IlcPointDescriptorSubtypeEnum</a> (by extension) |
| Sub-types:   | None                                                                                                                                                                          |

|                 |                                                         |
|-----------------|---------------------------------------------------------|
| Name            | <a href="#">_TpegLoc03IlcPointDescriptorSubtypeEnum</a> |
| <b>Abstract</b> | no                                                      |

XML Instance Representation

|                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;...   _extendedValue="xs:string [0..1]"&gt;     <a href="#">loc:TpegLoc03IlcPointDescriptorSubtypeEnum</a>   &lt;/...&gt;</pre> |
|------------------------------------------------------------------------------------------------------------------------------------------|

Schema Component Representation

|                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <pre>&lt;xs:complexType name="<a href="#">_TpegLoc03IlcPointDescriptorSubtypeEnum</a>"&gt;   &lt;xs:simpleContent&gt;     &lt;xs:extension base="<a href="#">loc:TpegLoc03IlcPointDescriptorSubtypeEnum</a>"&gt;       &lt;xs:attribute name="_extendedValue" type="xs:string"/&gt;     &lt;/xs:extension&gt;   &lt;/xs:simpleContent&gt; &lt;/xs:complexType&gt;</pre> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

[top](#)

Complex Type: **\_TpegLoc03JunctionPointDescriptorSubtypeEnum**

|              |                                                                                                                                                                                         |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Super-types: | <a href="#">xs:string</a> < <a href="#">_TpegLoc03JunctionPointDescriptorSubtypeEnum</a> (by restriction) < <a href="#">_TpegLoc03JunctionPointDescriptorSubtypeEnum</a> (by extension) |
| Sub-types:   | None                                                                                                                                                                                    |

|      |                                                              |
|------|--------------------------------------------------------------|
| Name | <a href="#">_TpegLoc03JunctionPointDescriptorSubtypeEnum</a> |
|------|--------------------------------------------------------------|

**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>
```

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Simple Type: **AlertCDirectionEnum**

Super-types: [xs:string](#) < [AlertCDirectionEnum](#) (by restriction)

Sub-types: 

- [\\_AlertCDirectionEnum](#) (by extension)

**Name** AlertCDirectionEnum

**Content**

- Base XSD Type: string
- 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.
- 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'|'mainCarriageway'|'oppositeCarriageway'|'parallelCarriageway'|'roundabout'|'serviceRoad'|'slipRoads'|'underpass'|'unspecifiedCarriageway'|'\_extended'}

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'|'southBound'|'southEastBound'|'\_extended'}

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="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

```
<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'|'onElevatedSection'|'onFlyover'|'onIceRoad'|'onLevelCrossing'|'onLinkRoad'|'onRoundabout'|'onTheRoadway'|'onUndergroundSection'|'onUnderpass'|'withinJunction'|'\_extended'}

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       | <div><ul style="list-style-type: none"><li>Base XSD Type: string</li><li><i>value</i> comes from list:<br/>{allLanesCompleteCarriageway busLane busStop carPoolLane centralReservation crawlerLane cycleLane emergencyLane escapeLane exp</li></ul></div> |
| 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       | <div><ul style="list-style-type: none"><li>Base XSD Type: string</li><li><i>value</i> comes from list: {'both' 'opposite' 'aligned' 'unknown' '_extended'}</li></ul></div> |
| 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       | <div><ul style="list-style-type: none"><li>Base XSD Type: string</li><li><i>value</i> comes from list: {'road' 'roadSection' 'slipRoad' 'other' '_extended'}</li></ul></div> |
| 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'|'metropolitanArea'|'municipality'|'parkAndRideSite'|'ruralCounty'|'sea'|'touristArea'|'trafficArea'|'urbanCounty'|'order1AdministrativeArea'|'order2AdministrativeArea'|'order3AdministrativeArea'|'order4AdministrativeArea'|'order5AdministrativeArea'|'policeForceControlArea'|'roadOperatorControlArea'|'waterArea'|'\_extended'}

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: **OpenlrFormOfWayEnum**

Super-types: [xs:string](#) < **OpenlrFormOfWayEnum** (by restriction)

Sub-types:

- [\\_OpenlrFormOfWayEnum](#) (by extension)

Name OpenlrFormOfWayEnum

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>
```

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### 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 subdivision 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:restriction>
</xs:simpleType>
```

```
<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'|'regionName'|'seaName'|'townName'|'other'|'\_extended'}

**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'|'c

#### 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>
```

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### 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>
```

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# DATEXII\_3\_TrafficCamerasExtension

---

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---

## Schema Document Properties

|                                         |                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target Namespace</b>                 | <a href="http://datex2.eu/schema/3/trafficCamerasExtension">http://datex2.eu/schema/3/trafficCamerasExtension</a>                                                                                                                                                                                      |
| <b>Version</b>                          | 3.0                                                                                                                                                                                                                                                                                                    |
| <b>Element and Attribute Namespaces</b> | <ul style="list-style-type: none"><li>• Global element and attribute declarations belong to this schema's target namespace.</li><li>• By default, local element declarations belong to this schema's target namespace.</li><li>• By default, local attribute declarations have no namespace.</li></ul> |
| <b>Schema Composition</b>               | <ul style="list-style-type: none"><li>• This schema imports schema(s) from the following namespace(s):<ul style="list-style-type: none"><li>◦ <a href="http://datex2.eu/schema/3/common">http://datex2.eu/schema/3/common</a> (at DATEXII_3_Common.xsd)</li></ul></li></ul>                            |

## 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                                                                                  |
| trafficCamerasExtension | <a href="http://datex2.eu/schema/3/trafficCamerasExtension">http://datex2.eu/schema/3/trafficCamerasExtension</a> |

## Schema Component Representation

```
<xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
version="3.0"
targetNamespace="http://datex2.eu/schema/3/trafficCamerasExtension">
  <xs:import namespace="http://datex2.eu/schema/3/common"
    schemaLocation="DATEXII_3_Common.xsd"/>
  ...
</xs:schema>
```

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---

## Global Definitions

### Complex Type: TrafficCameraRecord

|                     |      |
|---------------------|------|
| <i>Super-types:</i> | None |
| <i>Sub-types:</i>   | None |

|                      |                                  |
|----------------------|----------------------------------|
| <b>Name</b>          | TrafficCameraRecord              |
| <b>Abstract</b>      | no                               |
| <b>Documentation</b> | Realis TrafficCameraRecord class |

### XML Instance Representation

```

<...>
  <trafficCamerasExtension:cameraId> com:String
  </trafficCamerasExtension:cameraId> [0..1] ?
  <trafficCamerasExtension:updatedTS> com:DateTime
  </trafficCamerasExtension:updatedTS> [0..1] ?
  <trafficCamerasExtension:stillImageUrl> com:Url
  </trafficCamerasExtension:stillImageUrl> [0..1] ?
  <trafficCamerasExtension:stillImageContentType> com:String
  </trafficCamerasExtension:stillImageContentType> [0..1] ?
  <trafficCamerasExtension:stillImageHeight> com:NonNegativeInteger
  </trafficCamerasExtension:stillImageHeight> [0..1] ?
  <trafficCamerasExtension:stillImageWidth> com:NonNegativeInteger
  </trafficCamerasExtension:stillImageWidth> [0..1] ?
  <trafficCamerasExtension:stillImageRefreshIntervalMS>
com:NonNegativeInteger
  </trafficCamerasExtension:stillImageRefreshIntervalMS> [0..1] ?
  <trafficCamerasExtension:videoUrl> com:Url
  </trafficCamerasExtension:videoUrl> [0..1] ?
  <trafficCamerasExtension:videoContentType> com:String
  </trafficCamerasExtension:videoContentType> [0..1] ?
  <trafficCamerasExtension:videoHeight> com:NonNegativeInteger
  </trafficCamerasExtension:videoHeight> [0..1] ?
  <trafficCamerasExtension:videoWidth> com:NonNegativeInteger
  </trafficCamerasExtension:videoWidth> [0..1] ?
  <trafficCamerasExtension:videoFrameRate> com:Float
  </trafficCamerasExtension:videoFrameRate> [0..1] ?
  <trafficCamerasExtension:viewBearing> com:AngleInDegrees
  </trafficCamerasExtension:viewBearing> [0..1] ?
  <trafficCamerasExtension:viewAngle> com:AngleInDegrees
  </trafficCamerasExtension:viewAngle> [0..1] ?
  <trafficCamerasExtension:zoom> com:Float </trafficCamerasExtension:zoom>
[0..1] ?
  <trafficCamerasExtension:heightMeters> com:Float
  </trafficCamerasExtension:heightMeters> [0..1] ?
  <trafficCamerasExtension:cameraTitle> com:MultilingualString
  </trafficCamerasExtension:cameraTitle> [0..1] ?
  <trafficCamerasExtension:cameraDescription> com:MultilingualString
  </trafficCamerasExtension:cameraDescription> [0..1] ?
  <trafficCamerasExtension:groupId> com:String
  </trafficCamerasExtension:groupId> [0..1] ?
  <trafficCamerasExtension:groupName> com:MultilingualString
  </trafficCamerasExtension:groupName> [0..1] ?
  <trafficCamerasExtension:regionName> com:MultilingualString
  </trafficCamerasExtension:regionName> [0..1] ?
  <trafficCamerasExtension:cameraType>
trafficCamerasExtension:_TrafficCameraTypeEnum
  </trafficCamerasExtension:cameraType> [0..1] ?
  <trafficCamerasExtension:visibility>
trafficCamerasExtension:_TrafficCameraVisibilityEnum
  </trafficCamerasExtension:visibility> [0..1] ?
  <trafficCamerasExtension:cameraCapabilities>
trafficCamerasExtension:_TrafficCameraCapabilityEnum
  </trafficCamerasExtension:cameraCapabilities> [0..*] ?
  <trafficCamerasExtension:priority> com:NonNegativeInteger
  </trafficCamerasExtension:priority> [0..1] ?
  <trafficCamerasExtension:previousCameraId> com:String
  </trafficCamerasExtension:previousCameraId> [0..1] ?
  <trafficCamerasExtension:nextCameraId> com:String
  </trafficCamerasExtension:nextCameraId> [0..1] ?

```

</...>

## Schema Component Representation

```
<xs:complexType name="TrafficCameraRecord">
  <xs:sequence>
    <xs:element name="cameraId" type="com:String" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="updatedTS" type="com:DateTime" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="stillImageUrl" type="com:Url" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="stillImageContentType" type="com:String" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="stillImageHeight" type="com:NonNegativeInteger"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="stillImageWidth" type="com:NonNegativeInteger"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="stillImageRefreshIntervalMS"
      type="com:NonNegativeInteger" minOccurs="0" maxOccurs="1"/>
    <xs:element name="videoUrl" type="com:Url" minOccurs="0" maxOccurs="1"/>
    <xs:element name="videoContentType" type="com:String" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="videoHeight" type="com:NonNegativeInteger"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="videoWidth" type="com:NonNegativeInteger"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="videoFrameRate" type="com:Float" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="viewBearing" type="com:AngleInDegrees" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="viewAngle" type="com:AngleInDegrees" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="zoom" type="com:Float" minOccurs="0" maxOccurs="1"/>
    <xs:element name="heightMeters" type="com:Float" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="cameraTitle" type="com:MultilingualString"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="cameraDescription" type="com:MultilingualString"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="groupId" type="com:String" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="groupName" type="com:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="regionName" type="com:MultilingualString"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="cameraType"
      type="trafficCamerasExtension:_TrafficCameraTypeEnum" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="visibility"
      type="trafficCamerasExtension:_TrafficCameraVisibilityEnum"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="cameraCapabilities"
      type="trafficCamerasExtension:_TrafficCameraCapabilityEnum"
      minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="priority" type="com:NonNegativeInteger" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="previousCameraId" type="com:String" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="nextCameraId" type="com:String" minOccurs="0"
      maxOccurs="1"/>
  </xs:sequence>
</xs:complexType>
```

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## Complex Type: TrafficCameraCapabilityEnum



**Super-types:** [xs:string](#) < [TrafficCameraCapabilityEnum](#) (by restriction) < [\\_TrafficCameraCapabilityEnum](#) (by extension)

**Sub-types:** None

**Name** [\\_TrafficCameraCapabilityEnum](#)

**Abstract** no

#### XML Instance Representation

```
<...  
  _extendedValue="xs:string [0..1]">  
    trafficCamerasExtension:TrafficCameraCapabilityEnum  
</...>
```

#### Schema Component Representation

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

[top](#)

### Complex Type: [\\_TrafficCameraTypeEnum](#)

**Super-types:** [xs:string](#) < [TrafficCameraTypeEnum](#) (by restriction) < [\\_TrafficCameraTypeEnum](#) (by extension)

**Sub-types:** None

**Name** [\\_TrafficCameraTypeEnum](#)

**Abstract** no

#### XML Instance Representation

```
<...  
  _extendedValue="xs:string [0..1]">  
    trafficCamerasExtension:TrafficCameraTypeEnum  
</...>
```

#### Schema Component Representation

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

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### Complex Type: [\\_TrafficCameraVisibilityEnum](#)

**Super-types:** [xs:string](#) < [TrafficCameraVisibilityEnum](#) (by restriction) < [\\_TrafficCameraVisibilityEnum](#) (by extension)

**Sub-types:** None

**Name** `_TrafficCameraVisibilityEnum`

**Abstract** no

#### XML Instance Representation

```
<...  
  _extendedValue="xs:string [0..1]">  
    trafficCamerasExtension:TrafficCameraVisibilityEnum  
</...>
```

#### Schema Component Representation

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

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### Simple Type: **TrafficCameraCapabilityEnum**

*Super-types:* [xs:string](#) < **TrafficCameraCapabilityEnum** (by restriction)

*Sub-types:*

- [\\_TrafficCameraCapabilityEnum](#) (by extension)

**Name** TrafficCameraCapabilityEnum

**Content**

- Base XSD Type: string
- *value* comes from list:  
{'canPan'|'canTilt'|'canZoom'|'\_extended'}

**Documentation** Traffic camera capabilities enum

#### Schema Component Representation

```
<xs:simpleType name="TrafficCameraCapabilityEnum">  
  <xs:restriction base="xs:string">  
    <xs:enumeration value="canPan" />  
    <xs:enumeration value="canTilt" />  
    <xs:enumeration value="canZoom" />  
    <xs:enumeration value="_extended" />  
  </xs:restriction>  
</xs:simpleType>
```

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### Simple Type: **TrafficCameraTypeEnum**

*Super-types:* [xs:string](#) < **TrafficCameraTypeEnum** (by restriction)

*Sub-types:*

- [\\_TrafficCameraTypeEnum](#) (by extension)

**Name** TrafficCameraTypeEnum

**Content**

- Base XSD Type: string
- *value* comes from list: {'analog'|'digital'|'\_extended'}

**Schema Component Representation**

```
<xs:simpleType name="TrafficCameraTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="analog"/>
    <xs:enumeration value="digital"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)**Simple Type: TrafficCameraVisibilityEnum**

*Super-types:* [xs:string](#) < **TrafficCameraVisibilityEnum** (by restriction)

*Sub-types:*

- [\\_TrafficCameraVisibilityEnum](#) (by extension)

**Name** TrafficCameraVisibilityEnum

**Content**

- Base XSD Type: string
- *value* comes from list:  
{'noRestrictions'|'internalOnly'|'hidden'|'\_extended'}

**Documentation** Traffic camera visibility

**Schema Component Representation**

```
<xs:simpleType name="TrafficCameraVisibilityEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="noRestrictions"/>
    <xs:enumeration value="internalOnly"/>
    <xs:enumeration value="hidden"/>
    <xs:enumeration value="_extended"/>
  </xs:restriction>
</xs:simpleType>
```

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