

XML Schema Documentation

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Schema Document Properties

Target Namespace http://datex2.eu/schema/2/2_0

Version 2.3

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.

Declared Namespaces

Prefix	Namespace
xml	http://www.w3.org/XML/1998/namespace
xs	http://www.w3.org/2001/XMLSchema
D2LogicalModel	http://datex2.eu/schema/2/2_0

Schema Component Representation

```
<xs:schema elementFormDefault="qualified"
attributeFormDefault="unqualified" version="2.3"
targetNamespace="http://datex2.eu/schema/2/2_0">
...
</xs:schema>
```

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Global Declarations

Element: **d2LogicalModel**

Name	d2LogicalModel
Type	D2LogicalModel:D2LogicalModel
<u>Nillable</u>	no
<u>Abstract</u>	no

XML Instance Representation

```
<D2LogicalModel:d2LogicalModel
modelBaseVersion="2 [1]">
  <D2LogicalModel:exchange> D2LogicalModel:Exchange
</D2LogicalModel:exchange> [1]
  <D2LogicalModel:payloadPublication>
D2LogicalModel:PayloadPublication
</D2LogicalModel:payloadPublication> [0..1]
  <D2LogicalModel:d2LogicalModelExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:d2LogicalModelExtension> [0..1]
</D2LogicalModel:d2LogicalModel>
```

Schema Component Representation

```
<xs:element name="d2LogicalModel"
type="D2LogicalModel:D2LogicalModel"/>
```

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Global Definitions

Complex Type: **AffectedCarriagewayAndLanes**

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

Name	AffectedCarriagewayAndLanes
<u>Abstract</u>	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

```

<...>
  <D2LogicalModel:carriageway> D2LogicalModel:CarriagewayEnum
</D2LogicalModel:carriageway> [1] ?
  <D2LogicalModel:lane> D2LogicalModel:LaneEnum
</D2LogicalModel:lane> [0..*] ?
  <D2LogicalModel:footpath> D2LogicalModel:Boolean
</D2LogicalModel:footpath> [0..1] ?
  <D2LogicalModel:lengthAffected> D2LogicalModel:MetresAsFloat
</D2LogicalModel:lengthAffected> [0..1] ?
  <D2LogicalModel:affectedCarriagewayAndLanesExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:affectedCarriagewayAndLanesExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="AffectedCarriagewayAndLanes">
  <xs:sequence>
    <xs:element name="carriageway"
      type="D2LogicalModel:CarriagewayEnum" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="lane" type="D2LogicalModel:LaneEnum"
      minOccurs="0" maxOccurs="unbounded"/>
    <xs:element name="footpath" type="D2LogicalModel:Boolean"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="lengthAffected"
      type="D2LogicalModel:MetresAsFloat" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="affectedCarriagewayAndLanesExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)**Complex Type: AlertCDirection**

Super-types:	None
Sub-types:	None

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

XML Instance Representation

```

<...>
  <D2LogicalModel:alertCDirectionCoded>
D2LogicalModel:AlertCDirectionEnum
</D2LogicalModel:alertCDirectionCoded> [1] ?
  <D2LogicalModel:alertCDirectionNamed>

```

```

D2LogicalModel:MultilingualString
</D2LogicalModel:alertCDirectionNamed> [0..1] ?
<D2LogicalModel:alertCDirectionSense> D2LogicalModel:Boolean
</D2LogicalModel:alertCDirectionSense> [0..1] ?
<D2LogicalModel:alertCDirectionExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:alertCDirectionExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="AlertCDirection">
  <xs:sequence>
    <xs:element name="alertCDirectionCoded"
      type="D2LogicalModel:AlertCDirectionEnum" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="alertCDirectionNamed"
      type="D2LogicalModel:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="alertCDirectionSense"
      type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1"/>
    <xs:element name="alertCDirectionExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
</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

```

<...>
  <D2LogicalModel:alertCLocationName>
  D2LogicalModel:MultilingualString
  </D2LogicalModel:alertCLocationName> [0..1] ?
  <D2LogicalModel:specificLocation> D2LogicalModel:AlertCLocationCode
  </D2LogicalModel:specificLocation> [1] ?
  <D2LogicalModel:alertCLocationExtension>
  D2LogicalModel:ExtensionType
  </D2LogicalModel:alertCLocationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="AlertCLocation">
  <xs:sequence>
    <xs:element name="alertCLocationName"
      type="D2LogicalModel:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="specificLocation"

```

```

    type="D2LogicalModel:AlertCLocationCode" minOccurs="1"
    maxOccurs="1"/>
    <xs:element name="alertCLocationExtension"
    type="D2LogicalModel: ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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Complex Type: AlertCMethod4Point

Super-types: [AlertCPoint](#) < AlertCMethod4Point (by extension)

Sub-types: None

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

XML Instance Representation

```

<...>
  <D2LogicalModel:alertCLocationCountryCode> D2LogicalModel:String
</D2LogicalModel:alertCLocationCountryCode> [1] ?
  <D2LogicalModel:alertCLocationTableNumber> D2LogicalModel:String
</D2LogicalModel:alertCLocationTableNumber> [1] ?
  <D2LogicalModel:alertCLocationTableVersion> D2LogicalModel:String
</D2LogicalModel:alertCLocationTableVersion> [1] ?
  <D2LogicalModel:alertCPointExtension> D2LogicalModel: ExtensionType
</D2LogicalModel:alertCPointExtension> [0..1]
  <D2LogicalModel:alertCDirection> D2LogicalModel:AlertCDirection
</D2LogicalModel:alertCDirection> [1]
  <D2LogicalModel:alertCMethod4PrimaryPointLocation>
  D2LogicalModel:AlertCMethod4PrimaryPointLocation
</D2LogicalModel:alertCMethod4PrimaryPointLocation> [1]
  <D2LogicalModel:alertCMethod4PointExtension>
  D2LogicalModel: ExtensionType
</D2LogicalModel:alertCMethod4PointExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="AlertCMethod4Point">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:AlertCPoint">
      <xs:sequence>
        <xs:element name="alertCDirection"
          type="D2LogicalModel:AlertCDirection"/>
        <xs:element name="alertCMethod4PrimaryPointLocation"
          type="D2LogicalModel:AlertCMethod4PrimaryPointLocation"/>
        <xs:element name="alertCMethod4PointExtension"
          type="D2LogicalModel: 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

```
<...>
  <D2LogicalModel:alertCLocation> D2LogicalModel:AlertCLocation
</D2LogicalModel:alertCLocation> [1]
  <D2LogicalModel:offsetDistance> D2LogicalModel:OffsetDistance
</D2LogicalModel:offsetDistance> [1]
  <D2LogicalModel:alertCMethod4PrimaryPointLocationExtension>
  D2LogicalModel:ExtensionType
</D2LogicalModel:alertCMethod4PrimaryPointLocationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="AlertCMethod4PrimaryPointLocation">
  <xs:sequence>
    <xs:element name="alertCLocation"
      type="D2LogicalModel:AlertCLocation" />
    <xs:element name="offsetDistance"
      type="D2LogicalModel:OffsetDistance" />
    <xs:element name="alertCMethod4PrimaryPointLocationExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0" />
  </xs:sequence>
</xs:complexType>
```

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Complex Type: **AlertCPoint**

Super-types: None

Sub-types:

- [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

```
<...>
  <D2LogicalModel:alertCLocationCountryCode> D2LogicalModel:String
```

```

</D2LogicalModel:alertCLocationCountryCode> [1] ?
<D2LogicalModel:alertCLocationTableNumber> D2LogicalModel:String
</D2LogicalModel:alertCLocationTableNumber> [1] ?
<D2LogicalModel:alertCLocationTableVersion> D2LogicalModel:String
</D2LogicalModel:alertCLocationTableVersion> [1] ?
<D2LogicalModel:alertCPointExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:alertCPointExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="AlertCPoint" abstract="true">
  <xs:sequence>
    <xs:element name="alertCLocationCountryCode"
      type="D2LogicalModel:String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="alertCLocationTableNumber"
      type="D2LogicalModel:String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="alertCLocationTableVersion"
      type="D2LogicalModel:String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="alertCPointExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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Complex Type: **ApplicationRateValue**

Super-types: [DataValue](#) < **ApplicationRateValue** (by extension)
 Sub-types: None

Name	ApplicationRateValue
Abstract	no
Documentation	A measured or calculated value of the application rate of a substance.

XML Instance Representation

```

<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1] ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1] ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:applicationRate>
D2LogicalModel:IntensityKilogramsPerSquareMetre
</D2LogicalModel:applicationRate> [1] ?
  <D2LogicalModel:applicationRateValueExtension>

```



```

D2LogicalModel: ExtensionType
</D2LogicalModel:applicationRateValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="ApplicationRateValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="applicationRate"
          type="D2LogicalModel:IntensityKilogramsPerSquareMetre"
          minOccurs="1" maxOccurs="1"/>
        <xs:element name="applicationRateValueExtension"
          type="D2LogicalModel: ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: **BasicData**

Super-types: None

Sub-types:

- [WeatherData](#) (by extension)
 - [HumidityInformation](#) (by extension)
 - [PrecipitationInformation](#) (by extension)
 - [RoadSurfaceConditionInformation](#) (by extension)
 - [TemperatureInformation](#) (by extension)
 - [VisibilityInformation](#) (by extension)
 - [WindInformation](#) (by extension)

Name BasicData

Abstract yes

Documentation Data that is either measured or calculated (elaborated) at the same time or over the same time period.

XML Instance Representation

```

<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ?">
  <D2LogicalModel:measurementOrCalculationPeriod>
  D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
  D2LogicalModel:DateTime
  </D2LogicalModel:measurementOrCalculationTime> [0..1] ?
  <D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
  </D2LogicalModel:pertinentLocation> [0..1] ?
  <D2LogicalModel:basicDataExtension> D2LogicalModel: ExtensionType
  </D2LogicalModel:basicDataExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="BasicData" abstract="true">

```

```

<xs:sequence>
  <xs:element name="measurementOrCalculationPeriod"
    type="D2LogicalModel:Seconds" minOccurs="0" maxOccurs="1"/>
  <xs:element name="measurementOrCalculationTime"
    type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1"/>
  <xs:element name="pertinentLocation"
    type="D2LogicalModel:GroupOfLocations" minOccurs="0"/>
  <xs:element name="basicDataExtension"
    type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
</xs:sequence>
<xs:attribute name="measurementOrCalculatedTimePrecision"
  type="D2LogicalModel:TimePrecisionEnum" use="optional"/>
</xs:complexType>

```

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Complex Type: D2LogicalModel

Super-types:	None
Sub-types:	None

Name	D2LogicalModel
Abstract	no
Documentation	The DATEX II logical model comprising exchange, content payload and management sub-models.

XML Instance Representation

```

<...
  modelBaseVersion="2 [1]">
    <D2LogicalModel:exchange> D2LogicalModel:Exchange
  </D2LogicalModel:exchange> [1]
  <D2LogicalModel:payloadPublication>
    D2LogicalModel:PayloadPublication
  </D2LogicalModel:payloadPublication> [0..1]
  <D2LogicalModel:d2LogicalModelExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:d2LogicalModelExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="D2LogicalModel">
  <xs:sequence>
    <xs:element name="exchange" type="D2LogicalModel:Exchange"/>
    <xs:element name="payloadPublication"
      type="D2LogicalModel:PayloadPublication" minOccurs="0"/>
    <xs:element name="d2LogicalModelExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
  <xs:attribute name="modelBaseVersion" use="required" fixed="2"/>
</xs:complexType>

```

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Complex Type: DataValue

Super-types: None

Sub-types:

- [ApplicationRateValue](#) (by extension)
- [DirectionBearingValue](#) (by extension)
- [DirectionCompassValue](#) (by extension)
- [FloatingPointMetreDistanceValue](#) (by extension)
- [IntegerMetreDistanceValue](#) (by extension)
- [KilogramsConcentrationValue](#) (by extension)
- [PercentageValue](#) (by extension)
- [PrecipitationIntensityValue](#) (by extension)
- [SpeedValue](#) (by extension)
- [TemperatureValue](#) (by extension)

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

XML Instance Representation

```
<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="DataValue" abstract="true">
  <xs:sequence>
    <xs:element name="dataError" type="D2LogicalModel:Boolean"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="reasonForDataError"
      type="D2LogicalModel:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="dataValueExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
  <xs:attribute name="accuracy" type="D2LogicalModel:Percentage"
    use="optional"/>
  <xs:attribute name="computationalMethod"
    type="D2LogicalModel:ComputationMethodEnum" use="optional"/>
  <xs:attribute name="numberOfIncompleteInputs"
    type="D2LogicalModel:NonNegativeInteger" use="optional"/>
  <xs:attribute name="numberOfInputValuesUsed"
```

```

type="D2LogicalModel:NonNegativeInteger" use="optional"/>
<xs:attribute name="smoothingFactor" type="D2LogicalModel:Float"
use="optional"/>
<xs:attribute name="standardDeviation" type="D2LogicalModel:Float"
use="optional"/>
<xs:attribute name="supplierCalculatedDataQuality"
type="D2LogicalModel:Percentage" use="optional"/>
</xs:complexType>

```

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Complex Type: **DirectionBearingValue**

Super-types: [DataValue](#) < **DirectionBearingValue** (by extension)

Sub-types: None

Name	DirectionBearingValue
Abstract	no
Documentation	A measured or calculated value of direction as a bearing.

XML Instance Representation

```

<...
accuracy="D2LogicalModel:Percentage [0..1] ?"
computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
?"
numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
?"
smoothingFactor="D2LogicalModel:Float [0..1] ?"
standardDeviation="D2LogicalModel:Float [0..1] ?"
supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:directionBearing> D2LogicalModel:AngleInDegrees
</D2LogicalModel:directionBearing> [1] ?
  <D2LogicalModel:directionBearingValueExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:directionBearingValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="DirectionBearingValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="directionBearing"
type="D2LogicalModel:AngleInDegrees" minOccurs="1"
maxOccurs="1"/>
        <xs:element name="directionBearingValueExtension"
type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </complexContent>
</complexType>

```

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

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Complex Type: **DirectionCompassValue**

Super-types: [DataValue](#) < **DirectionCompassValue** (by extension)

Sub-types: None

Name	DirectionCompassValue
Abstract	no
Documentation	A measured or calculated value of direction as a point of the compass.

XML Instance Representation

```
<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
  </D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
  D2LogicalModel:MultilingualString
  </D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:directionCompass>
  D2LogicalModel:DirectionCompassEnum
  </D2LogicalModel:directionCompass> [1] ?
  <D2LogicalModel:directionCompassValueExtension>
  D2LogicalModel:_ExtensionType
  </D2LogicalModel:directionCompassValueExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="DirectionCompassValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="directionCompass"
          type="D2LogicalModel:DirectionCompassEnum" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="directionCompassValueExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Complex Type: **DistanceAlongLinearElement**

Super-types: None

Sub-types:

- [DistanceFromLinearElementStart](#) (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

```
<...>
  <D2LogicalModel:distanceAlongLinearElementExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:distanceAlongLinearElementExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="DistanceAlongLinearElement" abstract="true">
  <xs:sequence>
    <xs:element name="distanceAlongLinearElementExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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

```
<...>
  <D2LogicalModel:distanceAlongLinearElementExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:distanceAlongLinearElementExtension> [0..1]
  <D2LogicalModel:distanceAlong> D2LogicalModel:MetresAsFloat
  </D2LogicalModel:distanceAlong> [1] ?
  <D2LogicalModel:distanceFromLinearElementStartExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:distanceFromLinearElementStartExtension> [0..1]
</...>
```

```
</D2LogicalModel:distanceFromLinearElementStartExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="DistanceFromLinearElementStart">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DistanceAlongLinearElement">
      <xs:sequence>
        <xs:element name="distanceAlong"
          type="D2LogicalModel:MetresAsFloat" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="distanceFromLinearElementStartExtension"
          type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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Complex Type: **ElaboratedData**

Super-types: None

Sub-types: None

Name ElaboratedData

Abstract no

Documentation An instance of data which is derived/computed from one or more measurements over a period of time. It may be a current value or a forecast value predicted from historical measurements.

XML Instance Representation

```
<...>
  <D2LogicalModel:source> D2LogicalModel:Source
</D2LogicalModel:source> [0..1]
  <D2LogicalModel:elaboratedDataFault>
  D2LogicalModel:ElaboratedDataFault
</D2LogicalModel:elaboratedDataFault> [0..*]
  <D2LogicalModel:basicData> D2LogicalModel:BasicData
</D2LogicalModel:basicData> [0..1]
  <D2LogicalModel:elaboratedDataExtension>
  D2LogicalModel:ExtensionType
</D2LogicalModel:elaboratedDataExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="ElaboratedData">
  <xs:sequence>
    <xs:element name="source" type="D2LogicalModel:Source"
      minOccurs="0"/>
    <xs:element name="elaboratedDataFault"
      type="D2LogicalModel:ElaboratedDataFault" minOccurs="0"
      maxOccurs="unbounded"/>
    <xs:element name="basicData" type="D2LogicalModel:BasicData"
      minOccurs="0"/>
    <xs:element name="elaboratedDataExtension"
```

```

    type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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Complex Type: **ElaboratedDataFault**

Super-types: [Fault](#) < **ElaboratedDataFault** (by extension)
 Sub-types: None

Name ElaboratedDataFault
Abstract no
Documentation Details of a fault which is being reported for the related elaborated data.

XML Instance Representation

```

<...>
  <D2LogicalModel:faultIdentifier> D2LogicalModel:String
</D2LogicalModel:faultIdentifier> [0..1] ?
  <D2LogicalModel:faultDescription> D2LogicalModel:String
</D2LogicalModel:faultDescription> [0..1] ?
  <D2LogicalModel:faultCreationTime> D2LogicalModel:DateTime
</D2LogicalModel:faultCreationTime> [0..1] ?
  <D2LogicalModel:faultLastUpdateTime> D2LogicalModel:DateTime
</D2LogicalModel:faultLastUpdateTime> [1] ?
  <D2LogicalModel:faultSeverity> D2LogicalModel:FaultSeverityEnum
</D2LogicalModel:faultSeverity> [0..1] ?
  <D2LogicalModel:faultExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:faultExtension> [0..1]
  <D2LogicalModel:elaboratedDataFault>
  D2LogicalModel:ElaboratedDataFaultEnum
</D2LogicalModel:elaboratedDataFault> [1] ?
  <D2LogicalModel:elaboratedDataFaultExtension>
  D2LogicalModel:_ExtensionType
</D2LogicalModel:elaboratedDataFaultExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="ElaboratedDataFault">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Fault">
      <xs:sequence>
        <xs:element name="elaboratedDataFault"
          type="D2LogicalModel:ElaboratedDataFaultEnum" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="elaboratedDataFaultExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: **ElaboratedDataPublication**

Super-types: [PayloadPublication](#) < **ElaboratedDataPublication** (by extension)

Sub-types: None

Name ElaboratedDataPublication

Abstract no

Documentation A publication containing one or more elaborated data sets.

XML Instance Representation

```
<...
 lang="D2LogicalModel:Language [1] ? ">
  <D2LogicalModel:publicationTime> D2LogicalModel:DateTime
</D2LogicalModel:publicationTime> [1] ?
  <D2LogicalModel:publicationCreator>
D2LogicalModel:InternationalIdentifier
</D2LogicalModel:publicationCreator> [1]
  <D2LogicalModel:payloadPublicationExtension>
D2LogicalModel: ExtensionType
</D2LogicalModel:payloadPublicationExtension> [0..1]
  <D2LogicalModel:headerInformation> D2LogicalModel:HeaderInformation
</D2LogicalModel:headerInformation> [1]
  <D2LogicalModel:elaboratedData> D2LogicalModel:ElaboratedData
</D2LogicalModel:elaboratedData> [1..*]
  <D2LogicalModel:elaboratedDataPublicationExtension>
D2LogicalModel: ExtensionType
</D2LogicalModel:elaboratedDataPublicationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="ElaboratedDataPublication">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:PayloadPublication">
      <xs:sequence>
        <xs:element name="headerInformation"
          type="D2LogicalModel:HeaderInformation"/>
        <xs:element name="elaboratedData"
          type="D2LogicalModel:ElaboratedData"
          maxOccurs="unbounded"/>
        <xs:element name="elaboratedDataPublicationExtension"
          type="D2LogicalModel: ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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Complex Type: Exchange

Super-types: None

Sub-types: None

Name Exchange

Abstract no

Documentation

Details associated with the management of the exchange between the supplier and the client.

XML Instance Representation

```
<...>
  <D2LogicalModel:supplierIdentification>
    D2LogicalModel:InternationalIdentifier
  </D2LogicalModel:supplierIdentification> [1]
  <D2LogicalModel:exchangeExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:exchangeExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="Exchange">
  <xs:sequence>
    <xs:element name="supplierIdentification"
      type="D2LogicalModel:InternationalIdentifier"/>
    <xs:element name="exchangeExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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Complex Type: **Fault**

Super-types: None

Sub-types:

- [ElaboratedDataFault](#) (by extension)

Name Fault

Abstract no

Documentation Information about a fault relating to a specific piece of equipment or process.

XML Instance Representation

```
<...>
  <D2LogicalModel:faultIdentifier> D2LogicalModel:String
</D2LogicalModel:faultIdentifier> [0..1] ?
  <D2LogicalModel:faultDescription> D2LogicalModel:String
</D2LogicalModel:faultDescription> [0..1] ?
  <D2LogicalModel:faultCreationTime> D2LogicalModel:DateTime
</D2LogicalModel:faultCreationTime> [0..1] ?
  <D2LogicalModel:faultLastUpdateTime> D2LogicalModel:DateTime
</D2LogicalModel:faultLastUpdateTime> [1] ?
  <D2LogicalModel:faultSeverity> D2LogicalModel:FaultSeverityEnum
</D2LogicalModel:faultSeverity> [0..1] ?
  <D2LogicalModel:faultExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:faultExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="Fault">
  <xs:sequence>
    <xs:element name="faultIdentifier" type="D2LogicalModel:String"
```

```

minOccurs="0" maxOccurs="1"/>
<xs:element name="faultDescription" type="D2LogicalModel:String"
minOccurs="0" maxOccurs="1"/>
<xs:element name="faultCreationTime"
type="D2LogicalModel:DateTime" minOccurs="0" maxOccurs="1"/>
<xs:element name="faultLastUpdateTime"
type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1"/>
<xs:element name="faultSeverity"
type="D2LogicalModel:FaultSeverityEnum" minOccurs="0"
maxOccurs="1"/>
<xs:element name="faultExtension"
type="D2LogicalModel:ExtensionType" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

```

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Complex Type: **FloatingPointMetreDistanceValue**

Super-types: [DataValue](#) < **FloatingPointMetreDistanceValue** (by extension)

Sub-types: None

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

XML Instance Representation

```

<...
accuracy="D2LogicalModel:Percentage [0..1] ?"
computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
?"
numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
?"
smoothingFactor="D2LogicalModel:Float [0..1] ?"
standardDeviation="D2LogicalModel:Float [0..1] ?"
supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:floatingPointMetreDistance>
D2LogicalModel:MetresAsFloat
</D2LogicalModel:floatingPointMetreDistance> [1] ?
  <D2LogicalModel:floatingPointMetreDistanceValueExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:floatingPointMetreDistanceValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="FloatingPointMetreDistanceValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">

```

```

<xs:sequence>
  <xs:element name="floatingPointMetreDistance"
    type="D2LogicalModel:MetresAsFloat" minOccurs="1"
    maxOccurs="1"/>
  <xs:element name="floatingPointMetreDistanceValueExtension"
    type="D2LogicalModel: ExtensionType" minOccurs="0"/>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

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Complex Type: **GroupOfLocations**

Super-types: None

Sub-types:

- [Location](#) (by extension)
 - [NetworkLocation](#) (by extension)
 - [Point](#) (by extension)

Name GroupOfLocations

Abstract yes

Documentation One or more physically separate locations. Multiple locations may be related, as in an itinerary (or route), or may be unrelated. It is not for identifying the same physical location using different Location objects for different referencing systems.

XML Instance Representation

```

<...>
  <D2LogicalModel:groupOfLocationsExtension>
    D2LogicalModel: ExtensionType
  </D2LogicalModel:groupOfLocationsExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="GroupOfLocations" abstract="true">
  <xs:sequence>
    <xs:element name="groupOfLocationsExtension"
      type="D2LogicalModel: ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: **HeaderInformation**

Super-types: None

Sub-types: None

Name HeaderInformation

Abstract no

Documentation

Management information relating to the data contained within a publication.

XML Instance Representation

```
<...>
  <D2LogicalModel:areaOfInterest> D2LogicalModel:AreaOfInterestEnum
</D2LogicalModel:areaOfInterest> [0..1] ?
  <D2LogicalModel:confidentiality>
D2LogicalModel:ConfidentialityValueEnum
</D2LogicalModel:confidentiality> [1] ?
  <D2LogicalModel:informationStatus>
D2LogicalModel:InformationStatusEnum
</D2LogicalModel:informationStatus> [1] ?
  <D2LogicalModel:urgency> D2LogicalModel:UrgencyEnum
</D2LogicalModel:urgency> [0..1] ?
  <D2LogicalModel:headerInformationExtension>
D2LogicalModel:_ExtensionType
</D2LogicalModel:headerInformationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="HeaderInformation">
  <xs:sequence>
    <xs:element name="areaOfInterest"
      type="D2LogicalModel:AreaOfInterestEnum" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="confidentiality"
      type="D2LogicalModel:ConfidentialityValueEnum" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="informationStatus"
      type="D2LogicalModel:InformationStatusEnum" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="urgency" type="D2LogicalModel:UrgencyEnum"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="headerInformationExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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Complex Type: Humidity

Super-types:	None
Sub-types:	None

Name	Humidity
Abstract	no
Documentation	Details of atmospheric humidity.

XML Instance Representation

```
<...>
  <D2LogicalModel:relativeHumidity> D2LogicalModel:PercentageValue
</D2LogicalModel:relativeHumidity> [1] ?
  <D2LogicalModel:humidityExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:humidityExtension> [0..1]
```

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

Schema Component Representation

```
<xs:complexType name="Humidity">
  <xs:sequence>
    <xs:element name="relativeHumidity"
      type="D2LogicalModel:PercentageValue"/>
    <xs:element name="humidityExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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Complex Type: **HumidityInformation**

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **HumidityInformation** (by extension)

Sub-types: None

Name	HumidityInformation
Abstract	no
Documentation	Measurements of atmospheric humidity.

XML Instance Representation

```
<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ?">
  <D2LogicalModel:measurementOrCalculationPeriod>
    D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
    D2LogicalModel:DateTime
  </D2LogicalModel:measurementOrCalculationTime> [0..1] ?
  <D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
  </D2LogicalModel:pertinentLocation> [0..1] ?
  <D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:basicDataExtension> [0..1]
  <D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:weatherDataExtension> [0..1]
  <D2LogicalModel:humidity> D2LogicalModel:Humidity
  </D2LogicalModel:humidity> [1]
  <D2LogicalModel:humidityInformationExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:humidityInformationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="HumidityInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="humidity"
          type="D2LogicalModel:Humidity"/>
        <xs:element name="humidityInformationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

```
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
```

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Complex Type: **IntegerMetreDistanceValue**

Super-types: [DataValue](#) < **IntegerMetreDistanceValue** (by extension)

Sub-types: None

Name	IntegerMetreDistanceValue
Abstract	no
Documentation	A measured or calculated value of distance in whole metres.

XML Instance Representation

```
<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
  </D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
  D2LogicalModel:MultilingualString
  </D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:integerMetreDistance>
  D2LogicalModel:MetresAsNonNegativeInteger
  </D2LogicalModel:integerMetreDistance> [1] ?
  <D2LogicalModel:integerMetreDistanceValueExtension>
  D2LogicalModel:_ExtensionType
  </D2LogicalModel:integerMetreDistanceValueExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="IntegerMetreDistanceValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="integerMetreDistance"
          type="D2LogicalModel:MetresAsNonNegativeInteger"
          minOccurs="1" maxOccurs="1"/>
        <xs:element name="integerMetreDistanceValueExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

Complex Type: **InternationalIdentifier**

Super-types: None

Sub-types: None

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

XML Instance Representation

```
<...>
  <D2LogicalModel:country> D2LogicalModel:CountryEnum
</D2LogicalModel:country> [1] ?
  <D2LogicalModel:nationalIdentifier> D2LogicalModel:String
</D2LogicalModel:nationalIdentifier> [1] ?
  <D2LogicalModel:internationalIdentifierExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:internationalIdentifierExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="InternationalIdentifier">
  <xs:sequence>
    <xs:element name="country" type="D2LogicalModel:CountryEnum"
minOccurs="1" maxOccurs="1"/>
    <xs:element name="nationalIdentifier"
type="D2LogicalModel:String" minOccurs="1" maxOccurs="1"/>
    <xs:element name="internationalIdentifierExtension"
type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

Complex Type: **KilogramsConcentrationValue**

Super-types: [DataValue](#) < **KilogramsConcentrationValue** (by extension)

Sub-types: None

Name	KilogramsConcentrationValue
Abstract	no
Documentation	A measured or calculated value of concentration of a substance in grams per unit volume.

XML Instance Representation

```
<...
  accuracy="D2LogicalModel:Percentage [0..1] ? "
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ? "
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
```



```

? "
numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
? "
smoothingFactor="D2LogicalModel:Float [0..1] ? "
standardDeviation="D2LogicalModel:Float [0..1] ? "
supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ? ">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
<D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
<D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
<D2LogicalModel:kilogramsConcentration>
D2LogicalModel:ConcentrationKilogramsPerCubicMetre
</D2LogicalModel:kilogramsConcentration> [1] ?
<D2LogicalModel:kilogramsConcentrationValueExtension>
D2LogicalModel:_ExtensionType
</D2LogicalModel:kilogramsConcentrationValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="KilogramsConcentrationValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="kilogramsConcentration"
          type="D2LogicalModel:ConcentrationKilogramsPerCubicMetre"
          minOccurs="1" maxOccurs="1"/>
        <xs:element name="kilogramsConcentrationValueExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: **LinearElement**

Super-types: None

Sub-types:

- [LinearElementByCode](#) (by extension)

Name	LinearElement
Abstract	no
Documentation	A linear element along a single linear object, consistent with ISO 19148 definitions.

XML Instance Representation

```

<...>
  <D2LogicalModel:roadName> D2LogicalModel:MultilingualString
</D2LogicalModel:roadName> [0..1] ?
  <D2LogicalModel:linearElementExtension>
D2LogicalModel:_ExtensionType
</D2LogicalModel:linearElementExtension> [0..1]
</...>

```

Schema Component Representation

```
<xs:complexType name="LinearElement">
  <xs:sequence>
    <xs:element name="roadName"
      type="D2LogicalModel:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="linearElementExtension"
      type="D2LogicalModel: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

```
<...>
  <D2LogicalModel:roadName> D2LogicalModel:MultilingualString
</D2LogicalModel:roadName> [0..1] ?
  <D2LogicalModel:linearElementExtension>
  D2LogicalModel:ExtensionType
</D2LogicalModel:linearElementExtension> [0..1]
  <D2LogicalModel:linearElementIdentifier> D2LogicalModel:String
</D2LogicalModel:linearElementIdentifier> [1] ?
  <D2LogicalModel:linearElementByCodeExtension>
  D2LogicalModel:ExtensionType
</D2LogicalModel:linearElementByCodeExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="LinearElementByCode">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:LinearElement">
      <xs:sequence>
        <xs:element name="linearElementIdentifier"
          type="D2LogicalModel:String" minOccurs="1" maxOccurs="1"/>
        <xs:element name="linearElementByCodeExtension"
          type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

[top](#)

Complex Type: **Location**

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

Sub-types:

- [NetworkLocation](#) (by extension)
 - [Point](#) (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

```
<...>
  <D2LogicalModel:groupOfLocationsExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:groupOfLocationsExtension> [0..1]
  <D2LogicalModel:locationForDisplay> D2LogicalModel:PointCoordinates
  </D2LogicalModel:locationForDisplay> [0..1] ?
  <D2LogicalModel:locationExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:locationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="Location" abstract="true">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:GroupOfLocations">
      <xs:sequence>
        <xs:element name="locationForDisplay"
          type="D2LogicalModel:PointCoordinates" minOccurs="0"/>
        <xs:element name="locationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

[top](#)

Complex Type: **MultilingualString**

Super-types: None

Sub-types: None

Name	MultilingualString
Abstract	no

XML Instance Representation

```
<...>
  <D2LogicalModel:values> [1]
    <D2LogicalModel:value> D2LogicalModel:MultilingualStringValue
  </D2LogicalModel:value> [1..*]
  </D2LogicalModel:values>
</...>
```

Schema Component Representation

```
<xs:complexType name="MultilingualString">
  <xs:sequence>
    <xs:element name="values">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="value"
            type="D2LogicalModel:MultilingualStringValue"
            maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
</xs:complexType>
```

[top](#)

Complex Type: MultilingualStringValue

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

Sub-types: None

Name MultilingualStringValue

Abstract no

XML Instance Representation

```
<...
  lang="xs:language [0..1]">
  D2LogicalModel:MultilingualStringValueType
</...>
```

Schema Component Representation

```
<xs:complexType name="MultilingualStringValue">
  <xs:simpleContent>
    <xs:extension base="D2LogicalModel:MultilingualStringValueType">
      <xs:attribute name="lang" type="xs:language"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

[top](#)

Complex Type: NetworkLocation

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

Sub-types:

- [Point](#) (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

```

<...>
  <D2LogicalModel:groupOfLocationsExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:groupOfLocationsExtension> [0..1]
  <D2LogicalModel:locationForDisplay> D2LogicalModel:PointCoordinates
  </D2LogicalModel:locationForDisplay> [0..1] ?
  <D2LogicalModel:locationExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:locationExtension> [0..1]
  <D2LogicalModel:supplementaryPositionalDescription>
    D2LogicalModel:SupplementaryPositionalDescription
  </D2LogicalModel:supplementaryPositionalDescription> [0..1]
  <D2LogicalModel:networkLocationExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:networkLocationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="NetworkLocation" abstract="true">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:Location">
      <xs:sequence>
        <xs:element name="supplementaryPositionalDescription"
          type="D2LogicalModel:SupplementaryPositionalDescription"
          minOccurs="0"/>
        <xs:element name="networkLocationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

[top](#)

Complex Type: OffsetDistance

Super-types: None

Sub-types: None

Name OffsetDistance

Abstract no

Documentation The non negative offset distance from the ALERT-C referenced point to the actual point.

XML Instance Representation

```

<...>
  <D2LogicalModel:offsetDistance>
    D2LogicalModel:MetresAsNonNegativeInteger
  </D2LogicalModel:offsetDistance> [1] ?
  <D2LogicalModel:offsetDistanceExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:offsetDistanceExtension> [0..1]
</...>

```

Schema Component Representation

```
<xs:complexType name="OffsetDistance">
  <xs:sequence>
    <xs:element name="offsetDistance"
      type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="offsetDistanceExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

[top](#)

Complex Type: **PayloadPublication**

Super-types: None

Sub-types:

- [ElaboratedDataPublication](#) (by extension)

Name	PayloadPublication
Abstract	yes
Documentation	A payload publication of traffic related information or associated management information created at a specific point in time that can be exchanged via a DATEX II interface.

XML Instance Representation

```
<...
  lang="D2LogicalModel:Language [1] ?">
  <D2LogicalModel:publicationTime> D2LogicalModel:DateTime
</D2LogicalModel:publicationTime> [1] ?
  <D2LogicalModel:publicationCreator>
  D2LogicalModel:InternationalIdentifier
</D2LogicalModel:publicationCreator> [1]
  <D2LogicalModel:payloadPublicationExtension>
  D2LogicalModel:_ExtensionType
</D2LogicalModel:payloadPublicationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="PayloadPublication" abstract="true">
  <xs:sequence>
    <xs:element name="publicationTime"
      type="D2LogicalModel:DateTime" minOccurs="1" maxOccurs="1"/>
    <xs:element name="publicationCreator"
      type="D2LogicalModel:InternationalIdentifier"/>
    <xs:element name="payloadPublicationExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
  <xs:attribute name="lang" type="D2LogicalModel:Language"
    use="required"/>
</xs:complexType>
```

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Complex Type: **PercentageValue**

Super-types: [DataValue](#) < **PercentageValue** (by extension)

Sub-types: None

Name PercentageValue

Abstract no

Documentation A measured or calculated value expressed as a percentage.

XML Instance Representation

```
<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
  D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:percentage> D2LogicalModel:Percentage
</D2LogicalModel:percentage> [1] ?
  <D2LogicalModel:percentageValueExtension>
  D2LogicalModel:ExtensionType
</D2LogicalModel:percentageValueExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="PercentageValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="percentage"
          type="D2LogicalModel:Percentage" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="percentageValueExtension"
          type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

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Complex Type: **Point**

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

Sub-types: None

Name	Point
Abstract	no
Documentation	A single geospatial point.

XML Instance Representation

```

<...>
  <D2LogicalModel:groupOfLocationsExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:groupOfLocationsExtension> [0..1]
  <D2LogicalModel:locationForDisplay> D2LogicalModel:PointCoordinates
  </D2LogicalModel:locationForDisplay> [0..1] ?
  <D2LogicalModel:locationExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:locationExtension> [0..1]
  <D2LogicalModel:supplementaryPositionalDescription>
    D2LogicalModel:SupplementaryPositionalDescription
  </D2LogicalModel:supplementaryPositionalDescription> [0..1]
  <D2LogicalModel:networkLocationExtension>
    D2LogicalModel:_ExtensionType
  </D2LogicalModel:networkLocationExtension> [0..1]
  <D2LogicalModel>alertCPoint> D2LogicalModel:AlertCPoint
  </D2LogicalModel>alertCPoint> [0..1]
  <D2LogicalModel:pointAlongLinearElement>
    D2LogicalModel:PointAlongLinearElement
  </D2LogicalModel:pointAlongLinearElement> [0..1]
  <D2LogicalModel:pointByCoordinates>
    D2LogicalModel:PointByCoordinates
  </D2LogicalModel:pointByCoordinates> [0..1]
  <D2LogicalModel:pointExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:pointExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="Point">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:NetworkLocation">
      <xs:sequence>
        <xs:element name="alertCPoint"
          type="D2LogicalModel:AlertCPoint" minOccurs="0"/>
        <xs:element name="pointAlongLinearElement"
          type="D2LogicalModel:PointAlongLinearElement"
          minOccurs="0"/>
        <xs:element name="pointByCoordinates"
          type="D2LogicalModel:PointByCoordinates" minOccurs="0"/>
        <xs:element name="pointExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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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 ISO 19148 definitions.

XML Instance Representation

```

<...>
  <D2LogicalModel:directionRelativeAtPoint>
    D2LogicalModel:LinearReferencingDirectionEnum
  </D2LogicalModel:directionRelativeAtPoint> [0..1] ?
  <D2LogicalModel:linearElement> D2LogicalModel:LinearElement
  </D2LogicalModel:linearElement> [1]
  <D2LogicalModel:distanceAlongLinearElement>
    D2LogicalModel:DistanceAlongLinearElement
  </D2LogicalModel:distanceAlongLinearElement> [1]
  <D2LogicalModel:pointAlongLinearElementExtension>
    D2LogicalModel:ExtensionType
  </D2LogicalModel:pointAlongLinearElementExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="PointAlongLinearElement">
  <xs:sequence>
    <xs:element name="directionRelativeAtPoint"
      type="D2LogicalModel:LinearReferencingDirectionEnum"
      minOccurs="0" maxOccurs="1"/>
    <xs:element name="linearElement"
      type="D2LogicalModel:LinearElement"/>
    <xs:element name="distanceAlongLinearElement"
      type="D2LogicalModel:DistanceAlongLinearElement"/>
    <xs:element name="pointAlongLinearElementExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: PointByCoordinates

Super-types:	None
Sub-types:	None

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

XML Instance Representation

```

<...>
  <D2LogicalModel:pointCoordinates> D2LogicalModel:PointCoordinates
  </D2LogicalModel:pointCoordinates> [1]
  <D2LogicalModel:pointByCoordinatesExtension>
    D2LogicalModel:ExtensionType
  </D2LogicalModel:pointByCoordinatesExtension> [0..1]

```

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

Schema Component Representation

```
<xs:complexType name="PointByCoordinates">
  <xs:sequence>
    <xs:element name="pointCoordinates"
      type="D2LogicalModel:PointCoordinates"/>
    <xs:element name="pointByCoordinatesExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

[top](#)

Complex Type: PointCoordinates

Super-types: None

Sub-types: None

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

XML Instance Representation

```
<...>
  <D2LogicalModel:latitude> D2LogicalModel:Float
</D2LogicalModel:latitude> [1] ?
  <D2LogicalModel:longitude> D2LogicalModel:Float
</D2LogicalModel:longitude> [1] ?
  <D2LogicalModel:pointCoordinatesExtension>
  D2LogicalModel:_ExtensionType
</D2LogicalModel:pointCoordinatesExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="PointCoordinates">
  <xs:sequence>
    <xs:element name="latitude" type="D2LogicalModel:Float"
      minOccurs="1" maxOccurs="1"/>
    <xs:element name="longitude" type="D2LogicalModel:Float"
      minOccurs="1" maxOccurs="1"/>
    <xs:element name="pointCoordinatesExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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Complex Type: PrecipitationDetail

Super-types: None

Sub-types: None

Name PrecipitationDetail
Abstract no
Documentation Details of precipitation (rain, snow etc.).

XML Instance Representation

```
<...>
  <D2LogicalModel:precipitationType>
    D2LogicalModel:PrecipitationTypeEnum
  </D2LogicalModel:precipitationType> [0..1] ?
  <D2LogicalModel:precipitationIntensity>
    D2LogicalModel:PrecipitationIntensityValue
  </D2LogicalModel:precipitationIntensity> [0..1] ?
  <D2LogicalModel:depositionDepth>
    D2LogicalModel:FloatingPointMetreDistanceValue
  </D2LogicalModel:depositionDepth> [0..1] ?
  <D2LogicalModel:precipitationDetailExtension>
    D2LogicalModel:ExtensionType
  </D2LogicalModel:precipitationDetailExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="PrecipitationDetail">
  <xs:sequence>
    <xs:element name="precipitationType"
      type="D2LogicalModel:PrecipitationTypeEnum" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="precipitationIntensity"
      type="D2LogicalModel:PrecipitationIntensityValue"
      minOccurs="0"/>
    <xs:element name="depositionDepth"
      type="D2LogicalModel:FloatingPointMetreDistanceValue"
      minOccurs="0"/>
    <xs:element name="precipitationDetailExtension"
      type="D2LogicalModel:ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

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Complex Type: **PrecipitationInformation**

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **PrecipitationInformation** (by extension)

Sub-types: None

Name PrecipitationInformation
Abstract no
Documentation Measurements of precipitation.

XML Instance Representation

```
<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
```

```

[0..1] ? ">
  <D2LogicalModel:measurementOrCalculationPeriod>
  D2LogicalModel:Seconds
</D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
  D2LogicalModel:DateTime
</D2LogicalModel:measurementOrCalculationTime> [0..1] ?
  <D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
</D2LogicalModel:pertinentLocation> [0..1] ?
  <D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:basicDataExtension> [0..1]
  <D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:weatherDataExtension> [0..1]
  <D2LogicalModel:noPrecipitation> D2LogicalModel:Boolean
</D2LogicalModel:noPrecipitation> [0..1] ?
  <D2LogicalModel:precipitationDetail>
  D2LogicalModel:PrecipitationDetail
</D2LogicalModel:precipitationDetail> [0..1]
  <D2LogicalModel:precipitationInformationExtension>
  D2LogicalModel:_ExtensionType
</D2LogicalModel:precipitationInformationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="PrecipitationInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="noPrecipitation"
          type="D2LogicalModel:Boolean" minOccurs="0" maxOccurs="1"/>
        <xs:element name="precipitationDetail"
          type="D2LogicalModel:PrecipitationDetail" minOccurs="0"/>
        <xs:element name="precipitationInformationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: **PrecipitationIntensityValue**

Super-types: [DataValue](#) < **PrecipitationIntensityValue** (by extension)

Sub-types: None

Name	PrecipitationIntensityValue
Abstract	no
Documentation	A measured or calculated value of the accumulation rate of precipitation.

XML Instance Representation

```

<...
  accuracy="D2LogicalModel:Percentage [0..1] ? "
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ? "
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ? "

```

```

numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
? "
smoothingFactor="D2LogicalModel:Float [0..1] ? "
standardDeviation="D2LogicalModel:Float [0..1] ? "
supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ? ">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
</D2LogicalModel:dataError> [0..1] ?
<D2LogicalModel:reasonForDataError>
D2LogicalModel:MultilingualString
</D2LogicalModel:reasonForDataError> [0..1] ?
<D2LogicalModel:dataValueExtension> D2LogicalModel:ExtensionType
</D2LogicalModel:dataValueExtension> [0..1]
<D2LogicalModel:millimetresPerHourIntensity>
D2LogicalModel:IntensityMillimetresPerHour
</D2LogicalModel:millimetresPerHourIntensity> [1] ?
<D2LogicalModel:precipitationIntensityValueExtension>
D2LogicalModel:ExtensionType
</D2LogicalModel:precipitationIntensityValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="PrecipitationIntensityValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="millimetresPerHourIntensity"
          type="D2LogicalModel:IntensityMillimetresPerHour"
          minOccurs="1" maxOccurs="1"/>
        <xs:element name="precipitationIntensityValueExtension"
          type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: RoadSurfaceConditionInformation

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **RoadSurfaceConditionInformation** (by extension)

Sub-types: None

Name	RoadSurfaceConditionInformation
Abstract	no
Documentation	Measurements of road surface conditions which are related to the weather.

XML Instance Representation

```

<...
measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ? ">
  <D2LogicalModel:measurementOrCalculationPeriod>
D2LogicalModel:Seconds
</D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
<D2LogicalModel:measurementOrCalculationTime>
D2LogicalModel:DateTime

```

```

</D2LogicalModel:measurementOrCalculationTime> [0..1] ?
<D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
</D2LogicalModel:pertinentLocation> [0..1] ?
<D2LogicalModel:basicDataExtension> D2LogicalModel: _ExtensionType
</D2LogicalModel:basicDataExtension> [0..1]
<D2LogicalModel:weatherDataExtension> D2LogicalModel: _ExtensionType
</D2LogicalModel:weatherDataExtension> [0..1]
<D2LogicalModel:weatherRelatedRoadConditionType>
D2LogicalModel:WeatherRelatedRoadConditionTypeEnum
</D2LogicalModel:weatherRelatedRoadConditionType> [0..*] ?
<D2LogicalModel:roadSurfaceConditionMeasurements>
D2LogicalModel:RoadSurfaceConditionMeasurements
</D2LogicalModel:roadSurfaceConditionMeasurements> [1]
<D2LogicalModel:roadSurfaceConditionInformationExtension>
D2LogicalModel: _ExtensionType
</D2LogicalModel:roadSurfaceConditionInformationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="RoadSurfaceConditionInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="weatherRelatedRoadConditionType"
          type="D2LogicalModel:WeatherRelatedRoadConditionTypeEnum"
          minOccurs="0" maxOccurs="unbounded"/>
        <xs:element name="roadSurfaceConditionMeasurements"
          type="D2LogicalModel:RoadSurfaceConditionMeasurements"/>
        <xs:element name="roadSurfaceConditionInformationExtension"
          type="D2LogicalModel: _ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

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Complex Type: RoadSurfaceConditionMeasurements

Super-types:	None
Sub-types:	None

Name	RoadSurfaceConditionMeasurements
Abstract	no
Documentation	Measurements of the road surface condition which relate specifically to the weather.

XML Instance Representation

```

<...>
  <D2LogicalModel:roadSurfaceTemperature>
    D2LogicalModel:TemperatureValue
  </D2LogicalModel:roadSurfaceTemperature> [0..1] ?
  <D2LogicalModel:protectionTemperature>
    D2LogicalModel:TemperatureValue
  </D2LogicalModel:protectionTemperature> [0..1] ?
  <D2LogicalModel:deIcingApplicationRate>
    D2LogicalModel:ApplicationRateValue

```

```

</D2LogicalModel:deIcingApplicationRate> [0..1] ?
<D2LogicalModel:deIcingConcentration>
  D2LogicalModel:KilogramsConcentrationValue
</D2LogicalModel:deIcingConcentration> [0..1] ?
<D2LogicalModel:depthOfSnow>
  D2LogicalModel:FloatingPointMetreDistanceValue
</D2LogicalModel:depthOfSnow> [0..1] ?
<D2LogicalModel:waterFilmThickness>
  D2LogicalModel:FloatingPointMetreDistanceValue
</D2LogicalModel:waterFilmThickness> [0..1] ?
<D2LogicalModel:roadSurfaceConditionMeasurementsExtension>
  D2LogicalModel: ExtensionType
</D2LogicalModel:roadSurfaceConditionMeasurementsExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="RoadSurfaceConditionMeasurements">
  <xs:sequence>
    <xs:element name="roadSurfaceTemperature"
      type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="protectionTemperature"
      type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="deIcingApplicationRate"
      type="D2LogicalModel:ApplicationRateValue" minOccurs="0"/>
    <xs:element name="deIcingConcentration"
      type="D2LogicalModel:KilogramsConcentrationValue"
      minOccurs="0"/>
    <xs:element name="depthOfSnow"
      type="D2LogicalModel:FloatingPointMetreDistanceValue"
      minOccurs="0"/>
    <xs:element name="waterFilmThickness"
      type="D2LogicalModel:FloatingPointMetreDistanceValue"
      minOccurs="0"/>
    <xs:element name="roadSurfaceConditionMeasurementsExtension"
      type="D2LogicalModel: ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: **Source**

Super-types:	None
Sub-types:	None

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

XML Instance Representation

```

<...>
  <D2LogicalModel:sourceCountry> D2LogicalModel:CountryEnum
</D2LogicalModel:sourceCountry> [0..1] ?
  <D2LogicalModel:sourceIdentification> D2LogicalModel:String
</D2LogicalModel:sourceIdentification> [0..1] ?
  <D2LogicalModel:sourceName> D2LogicalModel:MultilingualString
</D2LogicalModel:sourceName> [0..1] ?

```

```

<D2LogicalModel:sourceType> D2LogicalModel:SourceTypeEnum
</D2LogicalModel:sourceType> [0..1] ?
<D2LogicalModel:sourceExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:sourceExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="Source">
  <xs:sequence>
    <xs:element name="sourceCountry"
      type="D2LogicalModel:CountryEnum" minOccurs="0" maxOccurs="1"/>
    <xs:element name="sourceIdentification"
      type="D2LogicalModel:String" minOccurs="0" maxOccurs="1"/>
    <xs:element name="sourceName"
      type="D2LogicalModel:MultilingualString" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="sourceType"
      type="D2LogicalModel:SourceTypeEnum" minOccurs="0"
      maxOccurs="1"/>
    <xs:element name="sourceExtension"
      type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: **SpeedValue**

Super-types: [DataValue](#) < **SpeedValue** (by extension)

Sub-types: None

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

XML Instance Representation

```

<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
  </D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
  D2LogicalModel:MultilingualString
  </D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:speed> D2LogicalModel:KilometresPerHour
  </D2LogicalModel:speed> [1] ?
  <D2LogicalModel:speedValueExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:speedValueExtension> [0..1]

```



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

Schema Component Representation

```
<xs:complexType name="SpeedValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="speed"
          type="D2LogicalModel:KilometresPerHour" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="speedValueExtension"
          type="D2LogicalModel:ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

[top](#)

Complex Type: **SupplementaryPositionalDescription**

Super-types: None

Sub-types: None

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

XML Instance Representation

```
<...
  locationPrecision="D2LogicalModel:MetresAsNonNegativeInteger [0..1]
  ? ">
  <D2LogicalModel:locationDescriptor>
  D2LogicalModel:LocationDescriptorEnum
  </D2LogicalModel:locationDescriptor> [0..*] ?
  <D2LogicalModel:sequentialRampNumber>
  D2LogicalModel:NonNegativeInteger
  </D2LogicalModel:sequentialRampNumber> [0..1] ?
  <D2LogicalModel:affectedCarriagewayAndLanes>
  D2LogicalModel:AffectedCarriagewayAndLanes
  </D2LogicalModel:affectedCarriagewayAndLanes> [0..*]
  <D2LogicalModel:supplementaryPositionalDescriptionExtension>
  D2LogicalModel:ExtensionType
  </D2LogicalModel:supplementaryPositionalDescriptionExtension>
  [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="SupplementaryPositionalDescription">
  <xs:sequence>
    <xs:element name="locationDescriptor"
      type="D2LogicalModel:LocationDescriptorEnum" minOccurs="0"
      maxOccurs="unbounded"/>
    <xs:element name="sequentialRampNumber"
      type="D2LogicalModel:NonNegativeInteger" minOccurs="0"
```

```

maxOccurs="1"/>
<xs:element name="affectedCarriagewayAndLanes"
type="D2LogicalModel:AffectedCarriagewayAndLanes" minOccurs="0"
maxOccurs="unbounded"/>
<xs:element name="supplementaryPositionalDescriptionExtension"
type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
</xs:sequence>
<xs:attribute name="locationPrecision"
type="D2LogicalModel:MetresAsNonNegativeInteger" use="optional"/>
</xs:complexType>

```

[top](#)

Complex Type: **Temperature**

Super-types:	None
Sub-types:	None

Name	Temperature
Abstract	no
Documentation	Details of atmospheric temperature.

XML Instance Representation

```

<...>
  <D2LogicalModel:airTemperature> D2LogicalModel:TemperatureValue
</D2LogicalModel:airTemperature> [0..1] ?
  <D2LogicalModel:dewPointTemperature>
  D2LogicalModel:TemperatureValue
</D2LogicalModel:dewPointTemperature> [0..1] ?
  <D2LogicalModel:maximumTemperature> D2LogicalModel:TemperatureValue
</D2LogicalModel:maximumTemperature> [0..1] ?
  <D2LogicalModel:minimumTemperature> D2LogicalModel:TemperatureValue
</D2LogicalModel:minimumTemperature> [0..1] ?
  <D2LogicalModel:temperatureExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:temperatureExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="Temperature">
  <xs:sequence>
    <xs:element name="airTemperature"
type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="dewPointTemperature"
type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="maximumTemperature"
type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="minimumTemperature"
type="D2LogicalModel:TemperatureValue" minOccurs="0"/>
    <xs:element name="temperatureExtension"
type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: **TemperatureInformation**

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **TemperatureInformation** (by extension)

Sub-types: None

Name TemperatureInformation

Abstract no

Documentation Measurements of atmospheric temperature.

XML Instance Representation

```
<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ? ">
  <D2LogicalModel:measurementOrCalculationPeriod>
  D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
  D2LogicalModel:DateTime
  </D2LogicalModel:measurementOrCalculationTime> [0..1] ?
  <D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
  </D2LogicalModel:pertinentLocation> [0..1] ?
  <D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:basicDataExtension> [0..1]
  <D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:weatherDataExtension> [0..1]
  <D2LogicalModel:temperature> D2LogicalModel:Temperature
  </D2LogicalModel:temperature> [1]
  <D2LogicalModel:temperatureInformationExtension>
  D2LogicalModel:_ExtensionType
  </D2LogicalModel:temperatureInformationExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="TemperatureInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="temperature"
          type="D2LogicalModel:Temperature"/>
        <xs:element name="temperatureInformationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>
```

[top](#)

Complex Type: **TemperatureValue**

Super-types: [DataValue](#) < **TemperatureValue** (by extension)

Sub-types: None

Name TemperatureValue

Abstract no

XML Instance Representation

```

<...
  accuracy="D2LogicalModel:Percentage [0..1] ?"
  computationalMethod="D2LogicalModel:ComputationMethodEnum [0..1] ?"
  numberOfIncompleteInputs="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  numberOfInputValuesUsed="D2LogicalModel:NonNegativeInteger [0..1]
  ?"
  smoothingFactor="D2LogicalModel:Float [0..1] ?"
  standardDeviation="D2LogicalModel:Float [0..1] ?"
  supplierCalculatedDataQuality="D2LogicalModel:Percentage [0..1] ?">
  <D2LogicalModel:dataError> D2LogicalModel:Boolean
  </D2LogicalModel:dataError> [0..1] ?
  <D2LogicalModel:reasonForDataError>
  D2LogicalModel:MultilingualString
  </D2LogicalModel:reasonForDataError> [0..1] ?
  <D2LogicalModel:dataValueExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:dataValueExtension> [0..1]
  <D2LogicalModel:temperature> D2LogicalModel:TemperatureCelsius
  </D2LogicalModel:temperature> [1] ?
  <D2LogicalModel:temperatureValueExtension>
  D2LogicalModel:_ExtensionType
  </D2LogicalModel:temperatureValueExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="TemperatureValue">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:DataValue">
      <xs:sequence>
        <xs:element name="temperature"
          type="D2LogicalModel:TemperatureCelsius" minOccurs="1"
          maxOccurs="1"/>
        <xs:element name="temperatureValueExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</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

```

<...>
  <D2LogicalModel:descriptor> D2LogicalModel:MultilingualString

```

```

</D2LogicalModel:descriptor> [1] ?
<D2LogicalModel:tpegDescriptorExtension>
  D2LogicalModel: ExtensionType
</D2LogicalModel:tpegDescriptorExtension> [0..1]
<D2LogicalModel:tpegAreaDescriptorType>
  D2LogicalModel:TpegLoc03AreaDescriptorSubtypeEnum
</D2LogicalModel:tpegAreaDescriptorType> [1] ?
<D2LogicalModel:tpegAreaDescriptorExtension>
  D2LogicalModel: ExtensionType
</D2LogicalModel:tpegAreaDescriptorExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="TpegAreaDescriptor">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:TpegDescriptor">
      <xs:sequence>
        <xs:element name="tpegAreaDescriptorType"
          type="D2LogicalModel:TpegLoc03AreaDescriptorSubtypeEnum"
          minOccurs="1" maxOccurs="1"/>
        <xs:element name="tpegAreaDescriptorExtension"
          type="D2LogicalModel: ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

[top](#)

Complex Type: TpegDescriptor

Super-types: None

Sub-types:

- [TpegAreaDescriptor](#) (by extension)

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

XML Instance Representation

```

<...>
  <D2LogicalModel:descriptor> D2LogicalModel:MultilingualString
</D2LogicalModel:descriptor> [1] ?
  <D2LogicalModel:tpegDescriptorExtension>
    D2LogicalModel: ExtensionType
  </D2LogicalModel:tpegDescriptorExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="TpegDescriptor" abstract="true">
  <xs:sequence>
    <xs:element name="descriptor"
      type="D2LogicalModel:MultilingualString" minOccurs="1"
      maxOccurs="1"/>
    <xs:element name="tpegDescriptorExtension"
      type="D2LogicalModel: ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>

```

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

[top](#)

Complex Type: **Visibility**

Super-types: None
Sub-types: None

Name Visibility
Abstract no
Documentation Details of atmospheric visibility.

XML Instance Representation

```
<...>
  <D2LogicalModel:minimumVisibilityDistance>
    D2LogicalModel:IntegerMetreDistanceValue
  </D2LogicalModel:minimumVisibilityDistance> [1] ?
  <D2LogicalModel:visibilityExtension> D2LogicalModel: _ExtensionType
</D2LogicalModel:visibilityExtension> [0..1]
</...>
```

Schema Component Representation

```
<xs:complexType name="Visibility">
  <xs:sequence>
    <xs:element name="minimumVisibilityDistance"
      type="D2LogicalModel:IntegerMetreDistanceValue"/>
    <xs:element name="visibilityExtension"
      type="D2LogicalModel: _ExtensionType" minOccurs="0"/>
  </xs:sequence>
</xs:complexType>
```

[top](#)

Complex Type: **VisibilityInformation**

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **VisibilityInformation** (by extension)
Sub-types: None

Name VisibilityInformation
Abstract no
Documentation Measurements of atmospheric visibility.

XML Instance Representation

```
<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ?">
  <D2LogicalModel:measurementOrCalculationPeriod>
    D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
```

```

<D2LogicalModel:measurementOrCalculationTime>
  D2LogicalModel:DateTime
</D2LogicalModel:measurementOrCalculationTime> [0..1] ?
<D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
</D2LogicalModel:pertinentLocation> [0..1] ?
<D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:basicDataExtension> [0..1]
<D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:weatherDataExtension> [0..1]
<D2LogicalModel:visibility> D2LogicalModel:Visibility
</D2LogicalModel:visibility> [1]
<D2LogicalModel:visibilityInformationExtension>
  D2LogicalModel:_ExtensionType
</D2LogicalModel:visibilityInformationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="VisibilityInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="visibility"
          type="D2LogicalModel:Visibility"/>
        <xs:element name="visibilityInformationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

[top](#)

Complex Type: **WeatherData**

Super-types: [BasicData](#) < **WeatherData** (by extension)

Sub-types:

- [HumidityInformation](#) (by extension)
- [PrecipitationInformation](#) (by extension)
- [RoadSurfaceConditionInformation](#) (by extension)
- [TemperatureInformation](#) (by extension)
- [VisibilityInformation](#) (by extension)
- [WindInformation](#) (by extension)

Name	WeatherData
Abstract	yes
Documentation	Measured or derived values relating to the weather at a specific location or locations.

XML Instance Representation

```

<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ?">
  <D2LogicalModel:measurementOrCalculationPeriod>
    D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
    D2LogicalModel:DateTime

```

```

</D2LogicalModel:measurementOrCalculationTime> [0..1] ?
<D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
</D2LogicalModel:pertinentLocation> [0..1] ?
<D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:basicDataExtension> [0..1]
<D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
</D2LogicalModel:weatherDataExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="WeatherData" abstract="true">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:BasicData">
      <xs:sequence>
        <xs:element name="weatherDataExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

[top](#)

Complex Type: **Wind**

Super-types: None

Sub-types: None

Name	Wind
Abstract	no
Documentation	Wind conditions on the road.

XML Instance Representation

```

<...>
  <D2LogicalModel:windMeasurementHeight>
    D2LogicalModel:MetresAsNonNegativeInteger
  </D2LogicalModel:windMeasurementHeight> [0..1] ?
  <D2LogicalModel:windSpeed> D2LogicalModel:SpeedValue
  </D2LogicalModel:windSpeed> [0..1] ?
  <D2LogicalModel:maximumWindSpeed> D2LogicalModel:SpeedValue
  </D2LogicalModel:maximumWindSpeed> [0..1] ?
  <D2LogicalModel:windDirectionBearing>
    D2LogicalModel:DirectionBearingValue
  </D2LogicalModel:windDirectionBearing> [0..1] ?
  <D2LogicalModel:windDirectionCompass>
    D2LogicalModel:DirectionCompassValue
  </D2LogicalModel:windDirectionCompass> [0..1] ?
  <D2LogicalModel:windExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:windExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="Wind">
  <xs:sequence>
    <xs:element name="windMeasurementHeight"
      type="D2LogicalModel:MetresAsNonNegativeInteger" minOccurs="0"

```



```

maxOccurs="1"/>
<xs:element name="windSpeed" type="D2LogicalModel:SpeedValue"
minOccurs="0"/>
<xs:element name="maximumWindSpeed"
type="D2LogicalModel:SpeedValue" minOccurs="0"/>
<xs:element name="windDirectionBearing"
type="D2LogicalModel:DirectionBearingValue" minOccurs="0"/>
<xs:element name="windDirectionCompass"
type="D2LogicalModel:DirectionCompassValue" minOccurs="0"/>
<xs:element name="windExtension"
type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
</xs:sequence>
</xs:complexType>

```

[top](#)

Complex Type: **WindInformation**

Super-types: [BasicData](#) < [WeatherData](#) (by extension) < **WindInformation** (by extension)

Sub-types: None

Name	WindInformation
Abstract	no
Documentation	Measurements of wind conditions.

XML Instance Representation

```

<...
  measurementOrCalculatedTimePrecision="D2LogicalModel:TimePrecisionEnum
[0..1] ? ">
  <D2LogicalModel:measurementOrCalculationPeriod>
  D2LogicalModel:Seconds
  </D2LogicalModel:measurementOrCalculationPeriod> [0..1] ?
  <D2LogicalModel:measurementOrCalculationTime>
  D2LogicalModel:DateTime
  </D2LogicalModel:measurementOrCalculationTime> [0..1] ?
  <D2LogicalModel:pertinentLocation> D2LogicalModel:GroupOfLocations
  </D2LogicalModel:pertinentLocation> [0..1] ?
  <D2LogicalModel:basicDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:basicDataExtension> [0..1]
  <D2LogicalModel:weatherDataExtension> D2LogicalModel:_ExtensionType
  </D2LogicalModel:weatherDataExtension> [0..1]
  <D2LogicalModel:wind> D2LogicalModel:Wind </D2LogicalModel:wind>
  [1]
  <D2LogicalModel:windInformationExtension>
  D2LogicalModel:_ExtensionType
  </D2LogicalModel:windInformationExtension> [0..1]
</...>

```

Schema Component Representation

```

<xs:complexType name="WindInformation">
  <xs:complexContent>
    <xs:extension base="D2LogicalModel:WeatherData">
      <xs:sequence>
        <xs:element name="wind" type="D2LogicalModel:Wind"/>
        <xs:element name="windInformationExtension"
          type="D2LogicalModel:_ExtensionType" minOccurs="0"/>
      </xs:sequence>
    </xs:extension>
  </xs:complexContent>
</xs:complexType>

```

```
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>
```

[top](#)

Complex Type: **_ExtensionType**

Super-types: None
Sub-types: None

Name _ExtensionType
Abstract no

XML Instance Representation

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

Schema Component Representation

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

[top](#)

Simple Type: **AlertCDirectionEnum**

Super-types: [xs:string](#) < **AlertCDirectionEnum** (by restriction)
Sub-types: None

Name AlertCDirectionEnum

Content

- Base XSD Type: string
- *value* comes from list: {'both'|'negative'|'positive'|'unknown'}

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

Schema Component Representation

```
<xs:simpleType name="AlertCDirectionEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="both"/>
    <xs:enumeration value="negative"/>
    <xs:enumeration value="positive"/>
    <xs:enumeration value="unknown"/>
  </xs:restriction>
</xs:simpleType>
```

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

[top](#)

Simple Type: **AlertCLocationCode**

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

Sub-types: None

Name AlertCLocationCode

Content

- Base XSD Type: nonNegativeInteger

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="D2LogicalModel:NonNegativeInteger"/>
</xs:simpleType>
```

[top](#)

Simple Type: **AngleInDegrees**

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

Sub-types: None

Name AngleInDegrees

Content

- Base XSD Type: nonNegativeInteger

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

Schema Component Representation

```
<xs:simpleType name="AngleInDegrees">
  <xs:restriction base="D2LogicalModel:NonNegativeInteger"/>
</xs:simpleType>
```

[top](#)

Simple Type: **AreaOfInterestEnum**

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

Sub-types: None

Name AreaOfInterestEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'continentWide'|'national'|'neighbouringCountries'|'notSpecified'|'regional'}

Documentation Types of areas of interest.

Schema Component Representation

```
<xs:simpleType name="AreaOfInterestEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="continentWide"/>
    <xs:enumeration value="national"/>
    <xs:enumeration value="neighbouringCountries"/>
    <xs:enumeration value="notSpecified"/>
    <xs:enumeration value="regional"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: Boolean

Super-types: [xs:boolean](#) < **Boolean** (by restriction)

Sub-types: None

Name Boolean

Content

- Base XSD Type: boolean

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

Schema Component Representation

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

[top](#)

Simple Type: CarriagewayEnum

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

Sub-types: None

Name CarriagewayEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'connectingCarriageway'|'entrySlipRoad'|'exitSlipRoad'|'flyover'|'leftHandFee'}

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="entrySlipRoad"/>
    <xs:enumeration value="exitSlipRoad"/>
    <xs:enumeration value="flyover"/>
    <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:restriction>
</xs:simpleType>

```

[top](#)

Simple Type: **ComputationMethodEnum**

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

Sub-types: None

Name ComputationMethodEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'arithmeticAverageOfSamplesBasedOnAFixedNumberOfSamples'|'arithmeti

Documentation Types of computational methods used in deriving data values for data sets.

Schema Component Representation

```

<xs:simpleType name="ComputationMethodEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration
      value="arithmeticAverageOfSamplesBasedOnAFixedNumberOfSamples"/>
    <xs:enumeration
      value="arithmeticAverageOfSamplesInATimePeriod"/>
    <xs:enumeration value="harmonicAverageOfSamplesInATimePeriod"/>
    <xs:enumeration value="medianOfSamplesInATimePeriod"/>
    <xs:enumeration value="movingAverageOfSamples"/>
  </xs:restriction>
</xs:simpleType>

```

[top](#)

Simple Type: **ConcentrationKilogramsPerCubicMetre**

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

Sub-types: None

Name	ConcentrationKilogramsPerCubicMetre
Content	<ul style="list-style-type: none"> • Base XSD Type: float
Documentation	Concentration defined in kilograms per cubic metre (equivalent to grams per litre under standard conditions).

Schema Component Representation

```
<xs:simpleType name="ConcentrationKilogramsPerCubicMetre">
  <xs:restriction base="D2LogicalModel:Float"/>
</xs:simpleType>
```

[top](#)

Simple Type: ConfidentialityValueEnum

<i>Super-types:</i>	xs:string < ConfidentialityValueEnum (by restriction)
<i>Sub-types:</i>	None

Name	ConfidentialityValueEnum
Content	<ul style="list-style-type: none"> • Base XSD Type: string • <i>value</i> comes from list: <ul style="list-style-type: none"> {'internalUse' 'noRestriction' 'restrictedToAuthorities' 'restrictedToAuthoritiesA
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="restrictedToAuthoritiesTrafficOperatorsAndPublishers"/>
    <xs:enumeration
      value="restrictedToAuthoritiesTrafficOperatorsAndVms"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: CountryEnum

<i>Super-types:</i>	xs:string < CountryEnum (by restriction)
<i>Sub-types:</i>	None

Name	CountryEnum
Content	<ul style="list-style-type: none"> • Base XSD Type: string • <i>value</i> comes from list:

{'at'|'be'|'bg'|'ch'|'cs'|'cy'|'cz'|'de'|'dk'|'ee'|'es'|'fi'|'fo'|'fr'|'gb'|'gg'|'gi'|'gr'|'hr'|'hu'|'ie'

Documentation List of countries.

Schema Component Representation

```
<xs:simpleType name="CountryEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="at"/>
    <xs:enumeration value="be"/>
    <xs:enumeration value="bg"/>
    <xs:enumeration value="ch"/>
    <xs:enumeration value="cs"/>
    <xs:enumeration value="cy"/>
    <xs:enumeration value="cz"/>
    <xs:enumeration value="de"/>
    <xs:enumeration value="dk"/>
    <xs:enumeration value="ee"/>
    <xs:enumeration value="es"/>
    <xs:enumeration value="fi"/>
    <xs:enumeration value="fo"/>
    <xs:enumeration value="fr"/>
    <xs:enumeration value="gb"/>
    <xs:enumeration value="gg"/>
    <xs:enumeration value="gi"/>
    <xs:enumeration value="gr"/>
    <xs:enumeration value="hr"/>
    <xs:enumeration value="hu"/>
    <xs:enumeration value="ie"/>
    <xs:enumeration value="im"/>
    <xs:enumeration value="is"/>
    <xs:enumeration value="it"/>
    <xs:enumeration value="je"/>
    <xs:enumeration value="li"/>
    <xs:enumeration value="lt"/>
    <xs:enumeration value="lu"/>
    <xs:enumeration value="lv"/>
    <xs:enumeration value="ma"/>
    <xs:enumeration value="mc"/>
    <xs:enumeration value="mk"/>
    <xs:enumeration value="mt"/>
    <xs:enumeration value="nl"/>
    <xs:enumeration value="no"/>
    <xs:enumeration value="pl"/>
    <xs:enumeration value="pt"/>
    <xs:enumeration value="ro"/>
    <xs:enumeration value="se"/>
    <xs:enumeration value="si"/>
    <xs:enumeration value="sk"/>
    <xs:enumeration value="sm"/>
    <xs:enumeration value="tr"/>
    <xs:enumeration value="va"/>
    <xs:enumeration value="other"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **DateTime**

Super-types: [xs:dateTime](#) < **DateTime** (by restriction)

Sub-types: None

Name DateTime

Content

- Base XSD Type: dateTime

Documentation

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

Schema Component Representation

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

[top](#)

Simple Type: **DirectionCompassEnum**

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

Sub-types: None

Name DirectionCompassEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'east'|'eastNorthEast'|'eastSouthEast'|'north'|'northEast'|'northNorthEast'|'northNorthWest'|'northWest'|'south'|'southEast'|'southSouthEast'|'southSouthWest'|'southWest'|'west'|'westNorthWest'|'westSouthWest'}

Documentation Cardinal direction points of the compass.

Schema Component Representation

```
<xs:simpleType name="DirectionCompassEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="east"/>
    <xs:enumeration value="eastNorthEast"/>
    <xs:enumeration value="eastSouthEast"/>
    <xs:enumeration value="north"/>
    <xs:enumeration value="northEast"/>
    <xs:enumeration value="northNorthEast"/>
    <xs:enumeration value="northNorthWest"/>
    <xs:enumeration value="northWest"/>
    <xs:enumeration value="south"/>
    <xs:enumeration value="southEast"/>
    <xs:enumeration value="southSouthEast"/>
    <xs:enumeration value="southSouthWest"/>
    <xs:enumeration value="southWest"/>
    <xs:enumeration value="west"/>
    <xs:enumeration value="westNorthWest"/>
    <xs:enumeration value="westSouthWest"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **ElaboratedDataFaultEnum**

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

Sub-types: None

Name ElaboratedDataFaultEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'intermittentDataValues'|'noDataValuesAvailable'|'spuriousUnreliableDataVa

Documentation Types of elaborated data faults.

Schema Component Representation

```
<xs:simpleType name="ElaboratedDataFaultEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="intermittentDataValues"/>
    <xs:enumeration value="noDataValuesAvailable"/>
    <xs:enumeration value="spuriousUnreliableDataValues"/>
    <xs:enumeration value="unspecifiedOrUnknownFault"/>
    <xs:enumeration value="other"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **FaultSeverityEnum**

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

Sub-types: None

Name FaultSeverityEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'low'|'medium'|'high'|'unknown'}

Documentation Classification of the severity of faults.

Schema Component Representation

```
<xs:simpleType name="FaultSeverityEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="low"/>
    <xs:enumeration value="medium"/>
    <xs:enumeration value="high"/>
    <xs:enumeration value="unknown"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **Float**

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

Sub-types:

- [ConcentrationKilogramsPerCubicMetre](#) (by restriction)
- [IntensityKilogramsPerSquareMetre](#) (by restriction)
- [IntensityMillimetresPerHour](#) (by restriction)
- [KilometresPerHour](#) (by restriction)
- [MetresAsFloat](#) (by restriction)
- [Percentage](#) (by restriction)
- [Seconds](#) (by restriction)
- [TemperatureCelsius](#) (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>
```

[top](#)

Simple Type: **InformationStatusEnum**

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

Sub-types: None

Name InformationStatusEnum

Content

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

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

[top](#)

Simple Type: **IntensityKilogramsPerSquareMetre**

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

restriction)
Sub-types: None

Name IntensityKilogramsPerSquareMetre

Content
• Base XSD Type: float

Documentation A measure of the quantity of application of a substance to an area defined in kilograms per square metre.

Schema Component Representation

```
<xs:simpleType name="IntensityKilogramsPerSquareMetre">  
  <xs:restriction base="D2LogicalModel:Float"/>  
</xs:simpleType>
```

[top](#)

Simple Type: **IntensityMillimetresPerHour**

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

Sub-types: None

Name IntensityMillimetresPerHour

Content
• Base XSD Type: float

Documentation A measure of precipitation intensity defined in millimetres per hour.

Schema Component Representation

```
<xs:simpleType name="IntensityMillimetresPerHour">  
  <xs:restriction base="D2LogicalModel:Float"/>  
</xs:simpleType>
```

[top](#)

Simple Type: **KilometresPerHour**

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

Sub-types: None

Name KilometresPerHour

Content
• Base XSD Type: float

Documentation A measure of speed defined in kilometres per hour.

Schema Component Representation

```
<xs:simpleType name="KilometresPerHour">  
  <xs:restriction base="D2LogicalModel:Float"/>  
</xs:simpleType>
```

Simple Type: LaneEnum

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

Sub-types: None

Name LaneEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'allLanesCompleteCarriageway'|'busLane'|'busStop'|'carPoolLane'|'centralR

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="emergencyLane"/>
    <xs:enumeration value="escapeLane"/>
    <xs:enumeration value="expressLane"/>
    <xs:enumeration value="hardShoulder"/>
    <xs:enumeration value="heavyVehicleLane"/>
    <xs:enumeration value="lane1"/>
    <xs:enumeration value="lane2"/>
    <xs:enumeration value="lane3"/>
    <xs:enumeration value="lane4"/>
    <xs:enumeration value="lane5"/>
    <xs:enumeration value="lane6"/>
    <xs:enumeration value="lane7"/>
    <xs:enumeration value="lane8"/>
    <xs:enumeration value="lane9"/>
    <xs:enumeration value="layBy"/>
    <xs:enumeration value="leftHandTurningLane"/>
    <xs:enumeration value="leftLane"/>
    <xs:enumeration value="localTrafficLane"/>
    <xs:enumeration value="middleLane"/>
    <xs:enumeration value="opposingLanes"/>
    <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:restriction>
</xs:simpleType>
```

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 / ISO 639-2 3-alpha code.

Schema Component Representation

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

[top](#)

Simple Type: **LinearReferencingDirectionEnum**

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

Sub-types: None

Name LinearReferencingDirectionEnum

Content

- Base XSD Type: string
- *value* comes from list:
 {'both'|'opposite'|'aligned'|'unknown'}

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

Schema Component Representation

```
<xs:simpleType name="LinearReferencingDirectionEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="both"/>
    <xs:enumeration value="opposite"/>
    <xs:enumeration value="aligned"/>
    <xs:enumeration value="unknown"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **LocationDescriptorEnum**

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

Sub-types: None

Name LocationDescriptorEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'aroundABendInRoad'|'atMotorwayInterchange'|'atRestArea'|'atServiceArea'

Documentation List of descriptors to help to identify a specific location.

Schema Component Representation

```
<xs:simpleType name="LocationDescriptorEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="aroundABendInRoad"/>
    <xs:enumeration value="atMotorwayInterchange"/>
    <xs:enumeration value="atRestArea"/>
    <xs:enumeration value="atServiceArea"/>
    <xs:enumeration value="atTollPlaza"/>
    <xs:enumeration value="atTunnelEntryOrExit"/>
    <xs:enumeration value="inbound"/>
    <xs:enumeration value="inGallery"/>
    <xs:enumeration value="inTheCentre"/>
    <xs:enumeration value="inTheOppositeDirection"/>
    <xs:enumeration value="inTunnel"/>
    <xs:enumeration value="onBorder"/>
    <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="onPass"/>
    <xs:enumeration value="onRoundabout"/>
    <xs:enumeration value="onTheLeft"/>
    <xs:enumeration value="onTheRight"/>
    <xs:enumeration value="onTheRoadway"/>
    <xs:enumeration value="onUndergroundSection"/>
    <xs:enumeration value="onUnderpass"/>
    <xs:enumeration value="outbound"/>
    <xs:enumeration value="overCrestOfHill"/>
    <xs:enumeration value="withinJunction"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **MetresAsFloat**

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

Sub-types: None

Name MetresAsFloat

Content

- Base XSD Type: float

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

Schema Component Representation

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

```
<xs:restriction base="D2LogicalModel:Float"/>
</xs:simpleType>
```

[top](#)

Simple Type: **MetresAsNonNegativeInteger**

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

Sub-types: None

Name MetresAsNonNegativeInteger

Content

- Base XSD Type: nonNegativeInteger

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

Schema Component Representation

```
<xs:simpleType name="MetresAsNonNegativeInteger">
  <xs:restriction base="D2LogicalModel:NonNegativeInteger"/>
</xs:simpleType>
```

[top](#)

Simple Type: **MultilingualStringValue**

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

Sub-types:

- [MultilingualStringValue](#) (by extension)

Name MultilingualStringValue

Content

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

Schema Component Representation

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

[top](#)

Simple Type: **NonNegativeInteger**

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

Sub-types:

- [AlertCLocationCode](#) (by restriction)
- [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>
```

[top](#)

Simple Type: **Percentage**

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

Sub-types: None

Name Percentage

Content

- Base XSD Type: float

Documentation A measure of percentage.

Schema Component Representation

```
<xs:simpleType name="Percentage">
  <xs:restriction base="D2LogicalModel:Float"/>
</xs:simpleType>
```

[top](#)

Simple Type: **PrecipitationTypeEnum**

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

Sub-types: None

Name PrecipitationTypeEnum

Content

- Base XSD Type: string
- *value* comes from list:
{drizzle|freezingRain|hail|rain|sleet|snow}

Documentation Types of precipitation.

Schema Component Representation

```
<xs:simpleType name="PrecipitationTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="drizzle"/>
    <xs:enumeration value="freezingRain"/>
    <xs:enumeration value="hail"/>
  </xs:restriction>
</xs:simpleType>
```



```

    <xs:enumeration value="rain"/>
    <xs:enumeration value="sleet"/>
    <xs:enumeration value="snow"/>
  </xs:restriction>
</xs:simpleType>

```

[top](#)

Simple Type: **Seconds**

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

Name Seconds
Content
 • Base XSD Type: float
Documentation Seconds.

Schema Component Representation

```

<xs:simpleType name="Seconds">
  <xs:restriction base="D2LogicalModel:Float"/>
</xs:simpleType>

```

[top](#)

Simple Type: **SourceTypeEnum**

Super-types: [xs:string](#) < **SourceTypeEnum** (by restriction)
Sub-types: None

Name SourceTypeEnum
Content
 • Base XSD Type: string
 • *value* comes from list:
 { 'automobileClubPatrol' | 'cameraObservation' | 'freightVehicleOperator' | 'inducti
Documentation Type of sources from which situation information may be derived.

Schema Component Representation

```

<xs:simpleType name="SourceTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="automobileClubPatrol"/>
    <xs:enumeration value="cameraObservation"/>
    <xs:enumeration value="freightVehicleOperator"/>
    <xs:enumeration value="inductionLoopMonitoringStation"/>
    <xs:enumeration value="infraredMonitoringStation"/>
    <xs:enumeration value="microwaveMonitoringStation"/>
    <xs:enumeration value="mobileTelephoneCaller"/>
    <xs:enumeration value="nonPoliceEmergencyServicePatrol"/>
    <xs:enumeration value="otherInformation"/>
    <xs:enumeration value="otherOfficialVehicle"/>
    <xs:enumeration value="policePatrol"/>
    <xs:enumeration value="privateBreakdownService"/>
    <xs:enumeration value="publicAndPrivateUtilities"/>
  </xs:restriction>
</xs:simpleType>

```

```

<xs:enumeration value="registeredMotoristObserver"/>
<xs:enumeration value="roadAuthorities"/>
<xs:enumeration value="roadOperatorPatrol"/>
<xs:enumeration value="roadsideTelephoneCaller"/>
<xs:enumeration value="spotterAircraft"/>
<xs:enumeration value="trafficMonitoringStation"/>
<xs:enumeration value="transitOperator"/>
<xs:enumeration value="vehicleProbeMeasurement"/>
<xs:enumeration value="videoProcessingMonitoringStation"/>
</xs:restriction>
</xs:simpleType>

```

[top](#)

Simple Type: **String**

Super-types: [xs:string](#) < **String** (by restriction)
Sub-types: None

Name String

Content

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

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

Schema Component Representation

```

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

```

[top](#)

Simple Type: **TemperatureCelsius**

Super-types: [xs:float](#) < [Float](#) (by restriction) < **TemperatureCelsius** (by restriction)
Sub-types: None

Name TemperatureCelsius

Content

- Base XSD Type: float

Documentation A measure of temperature defined in degrees Celsius.

Schema Component Representation

```

<xs:simpleType name="TemperatureCelsius">
  <xs:restriction base="D2LogicalModel:Float"/>
</xs:simpleType>

```

Simple Type: **TimePrecisionEnum**

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

Sub-types: None

Name TimePrecisionEnum

Content

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

Documentation List of precisions to which times can be given.

Schema Component Representation

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

Simple Type: **TpegLoc03AreaDescriptorSubtypeEnum**

Super-types: [xs:string](#) < **TpegLoc03AreaDescriptorSubtypeEnum** (by restriction)

Sub-types: None

Name TpegLoc03AreaDescriptorSubtypeEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'administrativeAreaName'|'administrativeReferenceName'|'areaName'|'countName'|'countyName'|'lakeName'|'nationName'|'policeForceControlAreaName'|'regionName'|'seaName'}

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

```
<xs:enumeration value="townName"/>
<xs:enumeration value="other"/>
</xs:restriction>
</xs:simpleType>
```

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Simple Type: **UrgencyEnum**

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

Sub-types: None

Name UrgencyEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'extremelyUrgent'|'urgent'|'normalUrgency'}

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

Schema Component Representation

```
<xs:simpleType name="UrgencyEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="extremelyUrgent"/>
    <xs:enumeration value="urgent"/>
    <xs:enumeration value="normalUrgency"/>
  </xs:restriction>
</xs:simpleType>
```

[top](#)

Simple Type: **WeatherRelatedRoadConditionTypeEnum**

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

Sub-types: None

Name WeatherRelatedRoadConditionTypeEnum

Content

- Base XSD Type: string
- *value* comes from list:
{'blackIce'|'deepSnow'|'dry'|'freezingOfWetRoads'|'freezingPavements'|'freezi

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

Schema Component Representation

```
<xs:simpleType name="WeatherRelatedRoadConditionTypeEnum">
  <xs:restriction base="xs:string">
    <xs:enumeration value="blackIce"/>
    <xs:enumeration value="deepSnow"/>
    <xs:enumeration value="dry"/>
    <xs:enumeration value="freezingOfWetRoads"/>
    <xs:enumeration value="freezingPavements"/>
  </xs:restriction>
</xs:simpleType>
```

```
<xs:enumeration value="freezingRain"/>
<xs:enumeration value="freshSnow"/>
<xs:enumeration value="ice"/>
<xs:enumeration value="iceBuildUp"/>
<xs:enumeration value="iceWithWheelBarTracks"/>
<xs:enumeration value="icyPatches"/>
<xs:enumeration value="looseSnow"/>
<xs:enumeration value="normalWinterConditionsForPedestrians"/>
<xs:enumeration value="packedSnow"/>
<xs:enumeration value="roadSurfaceMelting"/>
<xs:enumeration value="slipperyRoad"/>
<xs:enumeration value="slushOnRoad"/>
<xs:enumeration value="slushStrings"/>
<xs:enumeration value="snowDrifts"/>
<xs:enumeration value="snowOnPavement"/>
<xs:enumeration value="snowOnTheRoad"/>
<xs:enumeration value="surfaceWater"/>
<xs:enumeration value="wet"/>
<xs:enumeration value="wetAndIcyRoad"/>
<xs:enumeration value="wetIcyPavement"/>
<xs:enumeration value="other"/>
</xs:restriction>
</xs:simpleType>
```

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