

## Nautical Publications – Data Quality Schema

Schema **NPUBDQ.xsd**

Elements

[\*\*QualityOfNPIInformation\*\*](#)

[\*\*S101\\_DataQuality\*\*](#)

[\*\*S101\\_QualityOfNonbathymetricData\*\*](#)

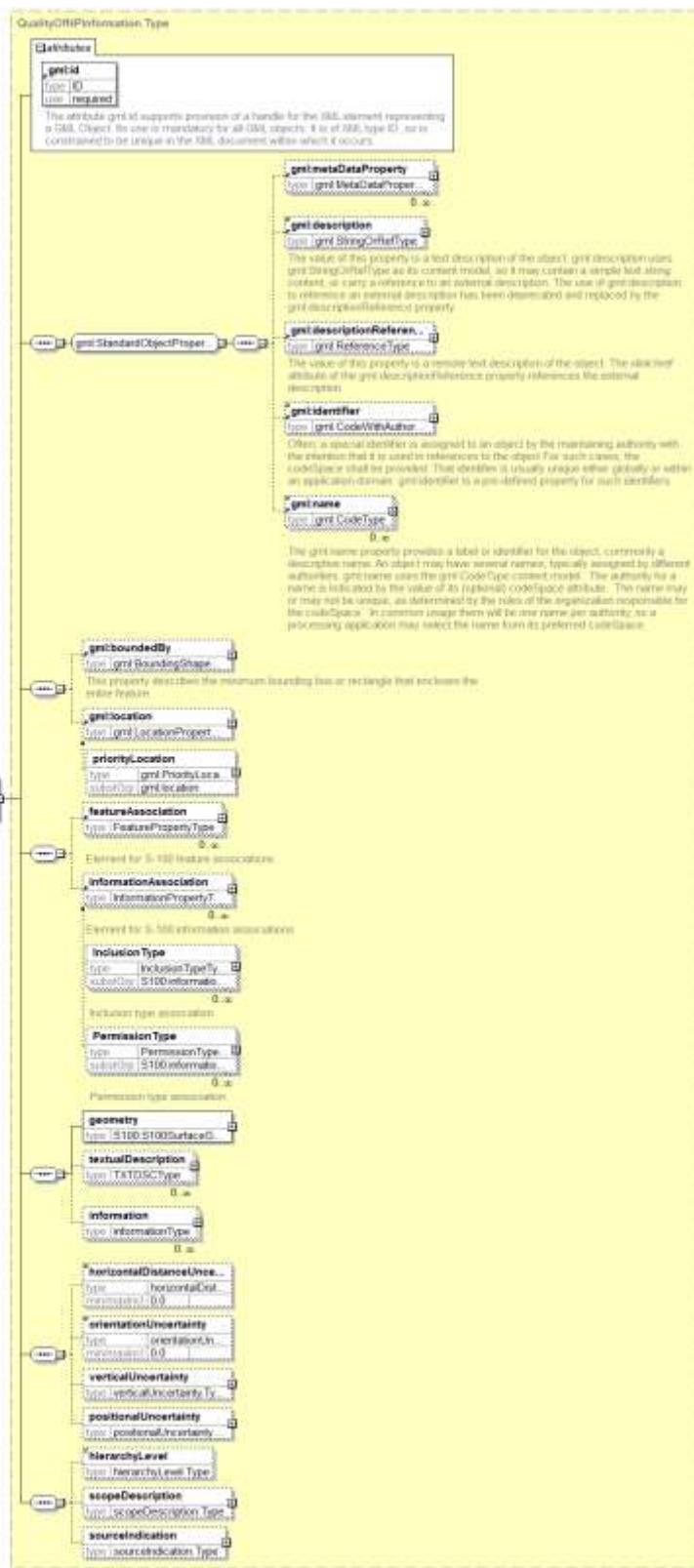
[\*\*S101\\_QualityOfTemporalVariation\*\*](#)

[\*\*S101\\_SpatialQuality\*\*](#)

[\*\*S101\\_SpatialQualityPoints\*\*](#)

## element QualityOfNPIinformation

diagram

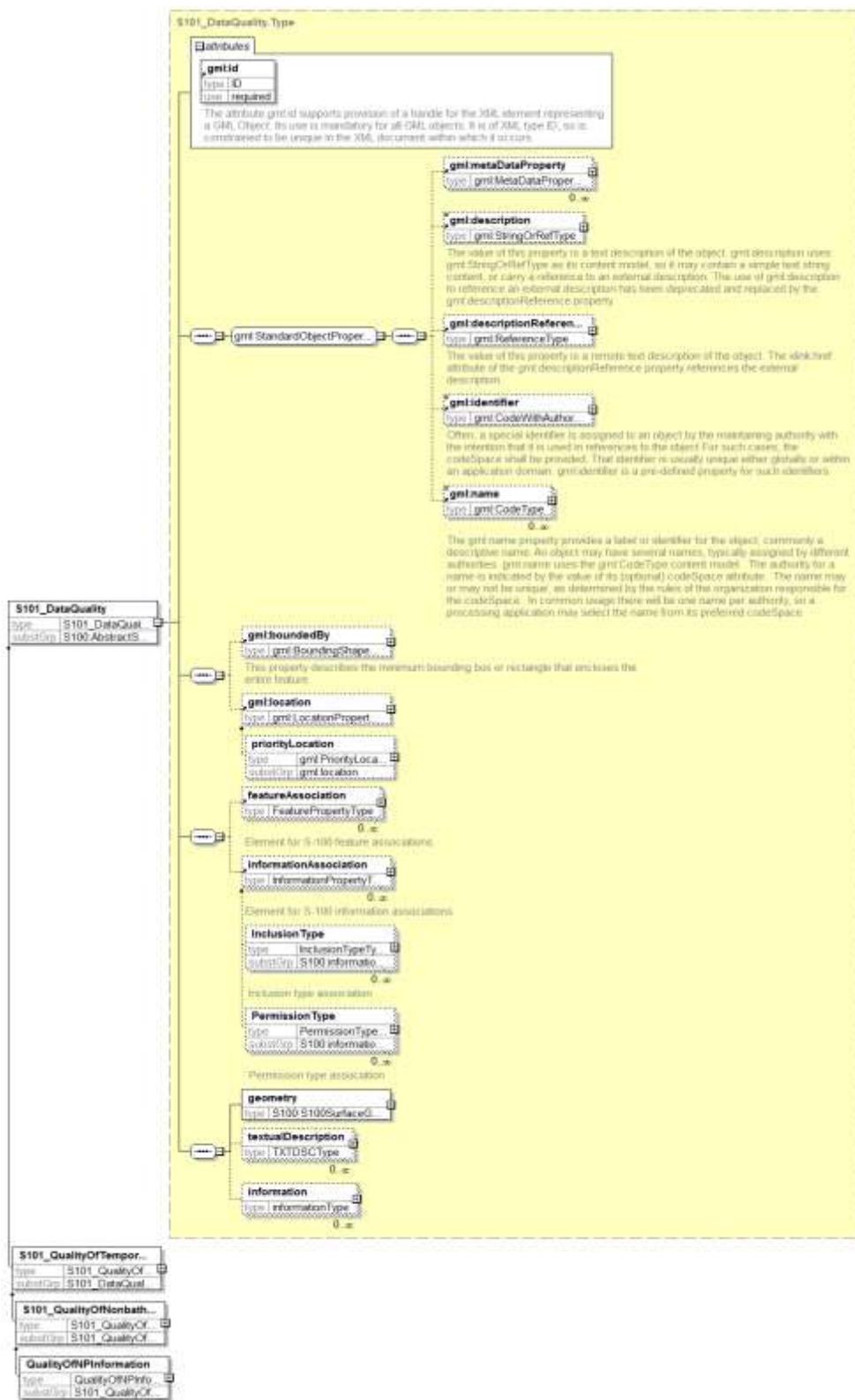


type	<b>QualityOfNPIinformation.Type</b>
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substitution group	<a href="#"><b>S101_QualityOfNonbathymetricData</b></a>																
properties	content complex																
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier            gml:name gml:boundedBy gml:location featureAssociation            informationAssociation geometry textualDescription information            horizontalDistanceUncertainty orientationUncertainty verticalUncertainty            positionalUncertainty hierarchyLevel scopeDescription sourceIndication</b>																
attributes	<table> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation documentation</th> </tr> </thead> <tbody> <tr> <td>gml:id</td> <td><b>xs:ID</b></td> <td>required</td> <td></td> <td></td> <td>The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.</td> </tr> </tbody> </table>					Name	Type	Use	Default	Fixed	Annotation documentation	gml:id	<b>xs:ID</b>	required			The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.
Name	Type	Use	Default	Fixed	Annotation documentation												
gml:id	<b>xs:ID</b>	required			The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.												

## element S101\_DataQuality

diagram

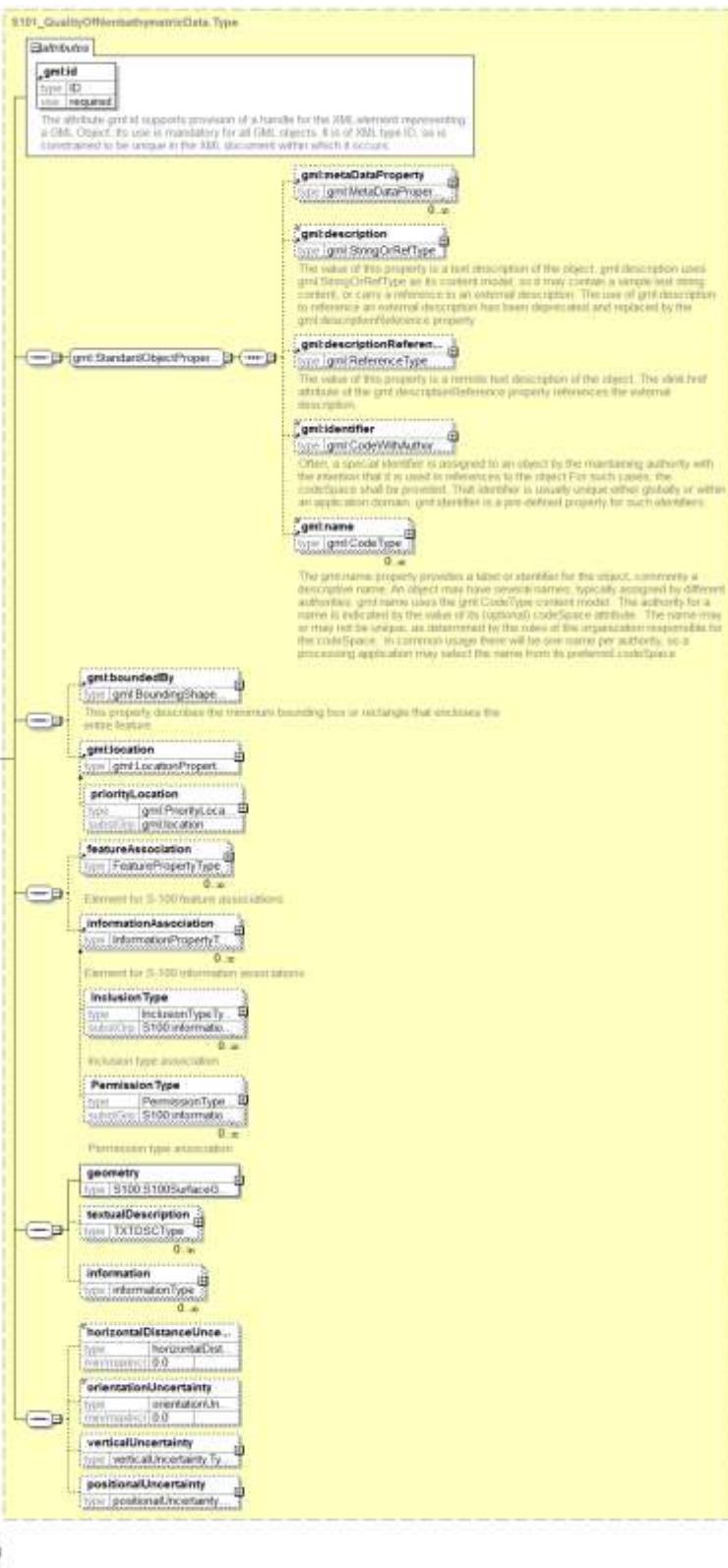


type **S101\_DataQuality.Type**

substitution group	<b>S100:AbstractS100Feature</b>					
properties	content complex					
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name gml:boundedBy gml:location featureAssociation informationAssociation geometry textualDescription information</b>					
attributes	Name gml:id	Type <b>xs:ID</b>	Use required	Default	Fixed	Annotation documentation The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.

## element S101\_QualityOfNonbathymetricData

diagram



**QualityOfNPIInformation**

type `QualityOfNPIInfo`

subClass `S101_QualityOf`

type **S101\_QualityOfNonbathymetricData.Type**

substitution group	<a href="#"><b>S101_QualityOfTemporalVariation</b></a>					
properties	content complex					
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier            gml:name gml:boundedBy gml:location featureAssociation            informationAssociation geometry textualDescription information            horizontalDistanceUncertainty orientationUncertainty verticalUncertainty            positionalUncertainty</b>					
attributes	Name gml:id	Type <b>xs:ID</b>	Use required	Default	Fixed	Annotation documentation  The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.

## element S101\_QualityOfTemporalVariation

diagram	<p><b>S101_QualityOfTemporalVariation.Type</b></p> <p><b>Attributes</b></p> <ul style="list-style-type: none"> <li><b>gml:id</b> (type: ID, use: required)</li> <li>The attribute gml:id supports provision of a handle for the XML element representing a GML Object; its use is mandatory for all GML objects. It is of XML type ID, so it is constrained to be unique in the XML document within which it occurs.</li> <li><b>gml:metaDataProperty</b> (type: gml:MetaDataType, multiplicity: 0..*)</li> <li><b>gml:description</b> (type: gml:StringOrRefType)</li> <li>The value of this property is a text description of the object. gml:description uses gml:StringOrRefType as its content model, so it may contain a simple text string, an href, or carry a reference to an external descriptor. The use of gml:description to reference an external description has been deprecated and replaced by the gml:descriptionReference property.</li> <li><b>gml:descriptionReference</b> (type: gml:ReferenceType)</li> <li>The value of this property is a remote text description of the object. The xlink:href attribute of the gml:descriptionReference property references the external description.</li> <li><b>gml:identifier</b> (type: gml:CodeWithAuthor)</li> <li>Often, a special identifier is assigned to an object by the maintaining authority with the intention that it is used in references to the object. For such cases, the codeSpace shall be provided. That identifier is usually unique either globally or within an application domain. gml:identifier is a pre-defined property for such identifiers.</li> <li><b>gml:name</b> (type: gml:CodeType, multiplicity: 0..*)</li> <li>This gml:name property provides a label or identifier for the object, commonly a descriptive name. An object may have several names, typically assigned by different authorities. gml:name uses the gml:CodeType content model. The authority for a name is indicated by the value of its (optional) codeSpace attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the codeSpace. In common usage there will be one name per authority, so a processing application may select the name from its preferred codeSpace.</li> </ul> <p><b>S101_QualityOfTemporalVariation</b></p> <p><b>Type:</b> S101_QualityOf, S101_DataQual</p> <p><b>Properties</b></p> <ul style="list-style-type: none"> <li><b>gml:boundedBy</b> (type: gml:BoundaryShape)</li> <li>This property describes the minimum bounding box or rectangle that encloses the entire feature.</li> <li><b>gml:location</b> (type: gml:LocationProperty)</li> <li><b>priorityLocation</b> (type: gml:PriorityLoc)</li> <li><b>featureAssociation</b> (type: FeaturePropertyType, multiplicity: 0..*)</li> <li>Element for 0-100 feature associations</li> <li><b>informationAssociation</b> (type: InformationPropertyType, multiplicity: 0..*)</li> <li>Element for 0-100 information associations</li> <li><b>Inclusion Type</b> (type: InclusionTypeType, multiplicity: 0..*)</li> <li>subsetOf: S100_Inform...</li> <li><b>PermissionType</b> (type: PermissionType, multiplicity: 0..*)</li> <li>subsetOf: S100_Inform...</li> <li><b>geometry</b> (type: S100_S100SurfaceG)</li> <li><b>textualDescription</b> (type: TXTDSType, multiplicity: 0..*)</li> <li><b>information</b> (type: InformationType, multiplicity: 0..*)</li> </ul> <p><b>S101_QualityOfNonbath...</b></p> <p><b>Type:</b> S101_QualityOf, S101_QualityOf</p> <p><b>QualityOfNPInformation</b></p> <p><b>Type:</b> QualityOfNPInfo, infoGrp, S101_QualityOf</p>
type	<b>S101_QualityOfTemporalVariation.Type</b>

substitution group	<a href="#"><b>S101_DataQuality</b></a>					
properties	content complex					
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name gml:boundedBy gml:location featureAssociation informationAssociation geometry textualDescription information</b>					
attributes	Name gml:id	Type <b>xs:ID</b>	Use required	Default	Fixed	Annotation documentation The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.

## element S101\_SpatialQuality

diagram	<p><b>S101_SpatialQuality.Type</b></p> <p><b>Attributes</b></p> <ul style="list-style-type: none"> <li><b>gml:id</b>: type <a href="#">ID</a>, use <b>required</b>. The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.</li> <li><b>gml:metaDataProperty</b>: type <a href="#">gml:MetaDataProperty</a>. 0..1.</li> <li><b>gml:description</b>: type <a href="#">gml:StringOrRefType</a>. The value of this property is a text description of the object; gml:description uses gml:StringOrRefType as its content model, so it may contain a simple text string content, or carry a reference to an external description. The use of gml:description to reference an external description has been deprecated and replaced by the gml:descriptionReference property.</li> <li><b>gml:descriptionReferenc...</b>: type <a href="#">gml:ReferenceType</a>. The value of this property is a remote text description of the object. The xlink:href attribute of the gml:descriptionReference property references the external description.</li> <li><b>gml:identifier</b>: type <a href="#">gml:CodeWithAuthor</a>. Often, a special identifier is assigned to an object by the maintaining authority with the intention that it is used in references to the object. For such cases, the codeSpace shall be provided. That identifier is usually unique either globally or within an application domain; gml:identifier is a pre-defined property for such identifiers.</li> <li><b>gml:name</b>: type <a href="#">gml:CodeType</a>. 0..1.</li> </ul> <p>The gml:name property provides a label or identifier for the object, commonly a descriptive name. An object may have several names, typically assigned by different authorities; gml:name uses the gml:CodeType content model. The authority for a name is indicated by the value of its (optional) codeSpace attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the codeSpace – in common usage there will be one name per authority, so a processing application may select the name from its preferred codeSpace.</p> <p><b>Information Association</b></p> <ul style="list-style-type: none"> <li><b>InclusionType</b>: type <a href="#">InclusionType</a>. 0..1. Element for S-100 information associations.</li> <li><b>PermissionType</b>: type <a href="#">PermissionType</a>. 0..1. Inclusion type association.</li> <li><b>inv_informationAssociat...</b>: type <a href="#">InformationProp</a>. 0..1. Permission type association.</li> </ul> <p><b>qualityOfPosition</b></p> <ul style="list-style-type: none"> <li><b>categoryOfTemporalvari...</b>: type <a href="#">categoryOfTemporalvari...</a>.</li> <li><b>positionalUncertainty</b>: type <a href="#">positionalUncertainty</a>.</li> </ul> <p><b>S101_SpatialQualityPoi...</b></p> <p><b>type</b>: <a href="#">S101_SpatialQ...</a>. <b>substitutionGroup</b>: <a href="#">S101_SpatialQ...</a>.</p>
<b>type</b>	<b>S101_SpatialQuality.Type</b>
<b>substitution group</b>	<b>gml:AbstractGML</b>

properties	content complex					
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier</b> <b>gml:name informationAssociation inv_informationAssociation qualityOfPosition</b> <b>categoryOfTemporalVariation positionalUncertainty</b>					
attributes	Name gml:id	Type <b>xs:ID</b>	Use required	Default	Fixed	Annotation documentation The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.

## element S101\_SpatialQualityPoints

diagram	<p><b>S101_SpatialQualityPoints.Type</b></p> <p><b>Attributes</b></p> <ul style="list-style-type: none"> <li><b>gml:id</b>: type <a href="#">ID</a>, use <b>required</b>. The attribute gml:id supports provision of a handle for the XML element representing a GML object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.</li> <li><b>gml:metaDataProperty</b>: type <a href="#">gml:MetaDataProperty</a>. 0..*</li> <li><b>gml:description</b>: type <a href="#">gml:StringOrRefType</a>. The value of this property is a text description of the object. gml:description uses gml:StringOrRefType as its content model, so it may contain a simple text string content, or carry a reference to an external description. The use of gml:description to reference an external description has been deprecated and replaced by the gml:descriptionReference property.</li> <li><b>gml:descriptionReferenc...</b>: type <a href="#">gml:ReferenceType</a>. The value of this property is a remote text description of the object. The xlink:href attribute of the gml:descriptionReference property references the external description.</li> <li><b>gml:identifier</b>: type <a href="#">gml:CodeWithAuthor</a>. Often, a special identifier is assigned to an object by the maintaining authority with the intention that it is used in references to the object. For such cases, the codeSpace shall be provided. That identifier is usually unique either globally or within an application domain. gml:identifier is a pre-defined property for such identifiers.</li> <li><b>gml:name</b>: type <a href="#">gml:CodeType</a>. 0..= The gml:name property provides a label or identifier for the object, commonly a descriptive name. An object may have several names, typically assigned by different authorities. gml:name uses the gml:CodeType content model. The authority for a name is indicated by the value of its (optional) codeSpace attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the codeSpace. In common usage there will be one name per authority; so a processing application may select the name from its preferred codeSpace.</li> </ul> <p><b>Information Association</b></p> <ul style="list-style-type: none"> <li><b>InclusionType</b>: type <a href="#">InclusionType</a>. 0..= Element for S-100 information associations.</li> <li><b>PermissionType</b>: type <a href="#">PermissionType</a>. 0..= Inclusion type association</li> <li><b>inv_informationAssociat...</b>: type <a href="#">InformationProp.</a>. 0..= Permission type association</li> </ul> <p><b>qualityOfPosition</b></p> <ul style="list-style-type: none"> <li><b>categoryOfTemporalVar...</b>: type <a href="#">categoryOfTemporalVar...</a>.</li> <li><b>positionalUncertainty</b>: type <a href="#">positionalUncertainty</a>.</li> <li><b>verticalUncertainty</b>: type <a href="#">verticalUncertainty</a>.</li> </ul>
type	<b>S101_SpatialQualityPoints.Type</b>
substitutio n group	<a href="#"><b>S101_SpatialQuality</b></a>

properties	content complex					
children	<b>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name informationAssociation inv_informationAssociation qualityOfPosition categoryOfTemporalVariation positionalUncertainty verticalUncertainty</b>					
attributes	Name gml:id	Type <b>xs:ID</b>	Use required	Default	Fixed	Annotation documentation The attribute gml:id supports provision of a handle for the XML element representing a GML Object. Its use is mandatory for all GML objects. It is of XML type ID, so is constrained to be unique in the XML document within which it occurs.