

Nautical Publications – S-100 Features Schema

Schema **S100Feature.xsd**

Elements

[AbstractGenericApplicationPropertyOfS100Feature](#)

[AbstractS100Feature](#)

[AbstractS100InformationObject](#)

[aggregationAssociation](#)

[compositionAssociation](#)

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[inv_featureAssociation](#)

[inv_informationAssociation](#)

element **AbstractGenericApplicationPropertyOfS100Feature**

diagram							
type	xs:anyType						
properties	content	complex					
	mixed	true					
	abstract	true					
attributes	Name	Type	Use	Default	Fixed	Annotation	
annotation	documentation Element for S-100 attributesp						

element **AbstractS100Feature**

<p>diagram</p>						
<p>type</p>	<p>AbstractS100FeatureType</p>					
<p>substitution group</p>	<p>gml:AbstractFeature</p>					
<p>properties</p>	<p>content complex abstract true</p>					
<p>children</p>	<p>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name gml:boundedBy gml:location featureAssociation informationAssociation</p>					
<p>attributes</p>	<p>Name gml:id</p>	<p>Type xs:ID</p>	<p>Use required</p>	<p>Default</p>	<p>Fixed</p>	<p>Annotation documentation The attribute gml:id supports provision of a</p>

		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.
annotation	documentation Element for S-100 features - needed as head of substitution group	

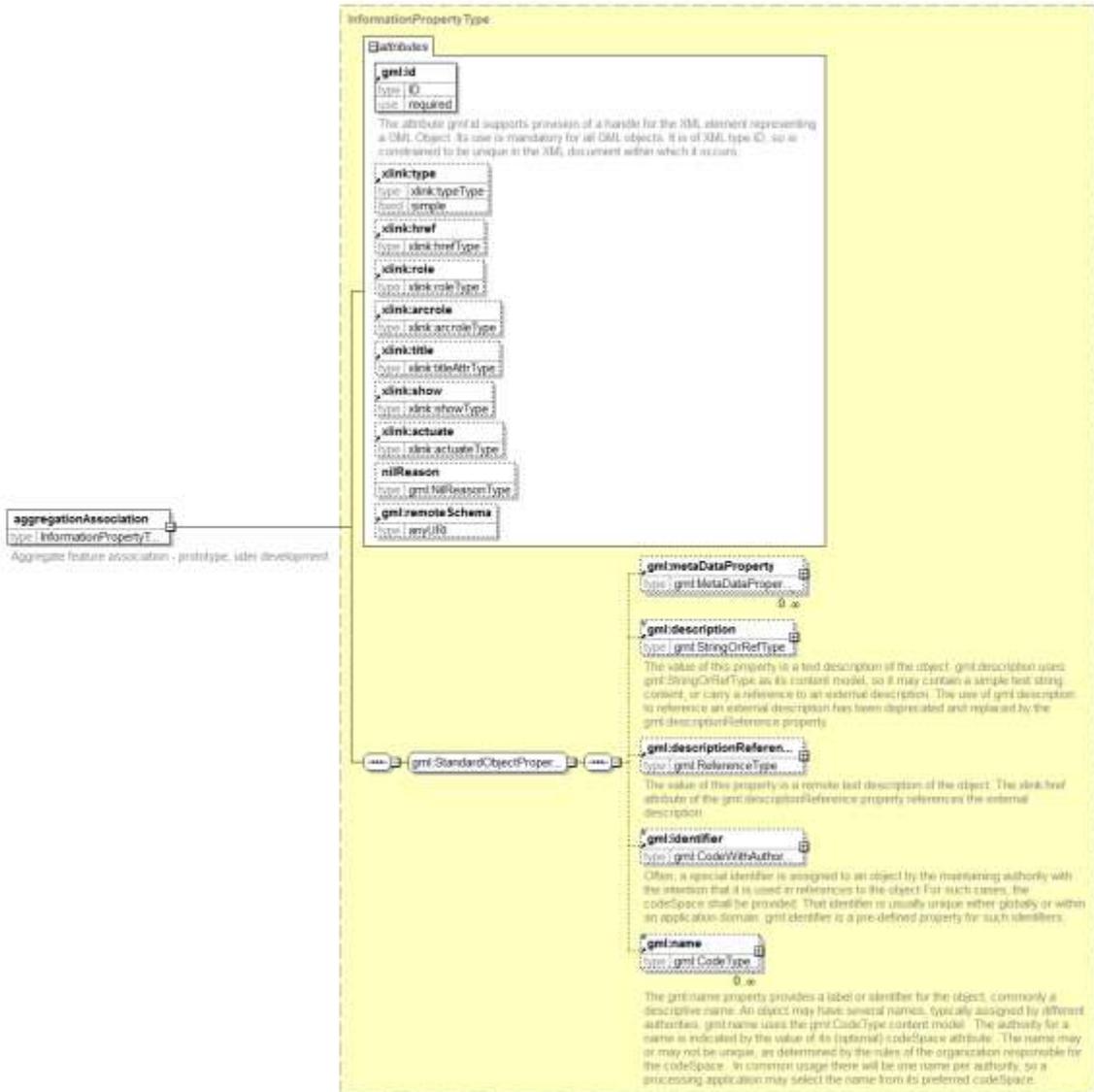
element **AbstractS100InformationObject**

diagram	
type	AbstractS100InformationType

substitution group	gml:AbstractGML					
properties	content	complex				
	abstract	true				
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name informationAssociation inv_informationAssociation					
attributes	Name	Type	Use	Default	Fixed	Annotation
	gml:id	xs:ID	required			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.
annotation	documentation Element for S-100 info types - needed as head of substitution group.					

element **aggregationAssociation**

diagram



type	InformationPropertyType					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
used by	complexType	AbstractS100CollectionFeatureType				
attributes	Name	Type	Use	Default	Fixed	Annotation
	gml:id	xs:ID	required	t		documentation The attribute gml:id supports

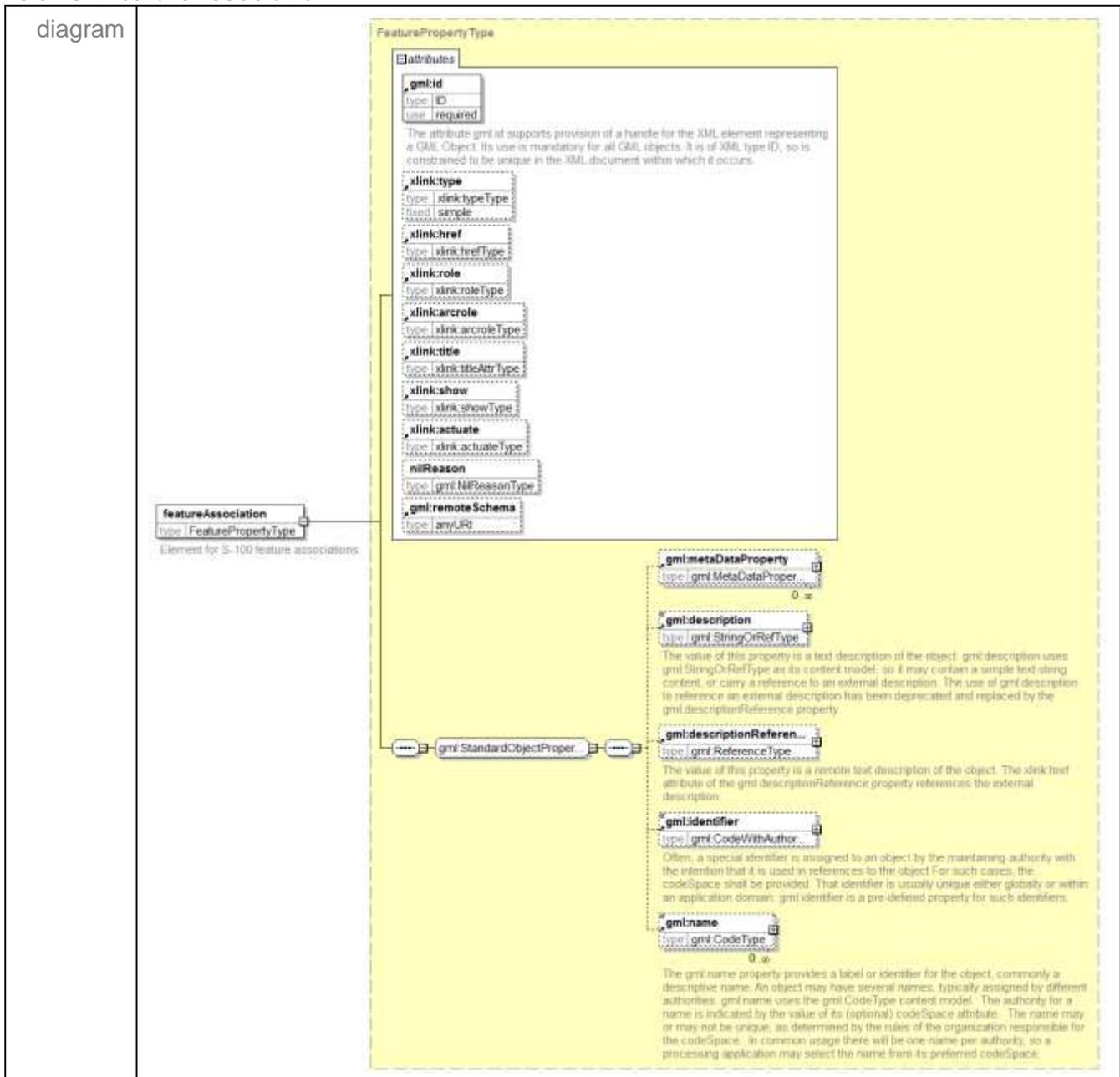
	<p> xlink:type xlink:typeType xlink:href xlink:hrefType xlink:role xlink:roleType xlink:arcrole xlink:arcroleType xlink:title xlink:titleAttrType xlink:show xlink:showType xlink:actuate xlink:actuateType nilReason gml:nilReasonType gml:remoteSchema xs:anyURI </p>	<p> provision of a handle for the XML 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. </p> <p> simple </p> <p> appinfo deprecated </p>
<p> annotation </p>	<p> documentation Aggregate feature association - prototype, under development </p>	

element compositionAssociation

<p>diagram</p>	<p>InformationPropertyType</p> <p>Attributes</p> <ul style="list-style-type: none"> gml:id type: ID use: 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. xlink:type type: xlink:type.Type use: simple xlink:href type: xlink:href.Type xlink:role type: xlink:role.Type xlink:arcrole type: xlink:arcrole.Type xlink:title type: xlink:title.Type xlink:show type: xlink:show.Type xlink:actuate type: xlink:actuate.Type nilReason type: gml:nilReason.Type gml:remoteSchema type: anyURI <p>gml:metaDataProperty type: gml:MetaDataProperty</p> <p>gml:description type: gml:StringOrRefType 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.</p> <p>gml:descriptionReference type: gml:ReferenceType 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.</p> <p>gml:identifier type: gml:CodeWithAuthor Often, a special identifier is assigned to an object by the marking 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.</p> <p>gml:name type: gml:CodeType 0..*</p> <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>type</p>	<p>InformationPropertyType</p>												
<p>properties</p>	<p>content complex</p>												
<p>children</p>	<p>gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name</p>												
<p>used by</p>	<p>complexType AbstractS100CollectionFeatureType</p>												
<p>attributes</p>	<table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> <th>Use</th> <th>Default</th> <th>Fixed</th> <th>Annotation</th> </tr> </thead> <tbody> <tr> <td>gml:id</td> <td>xs:ID</td> <td>required</td> <td>t</td> <td></td> <td>documentation The attribute gml:id supports</td> </tr> </tbody> </table>	Name	Type	Use	Default	Fixed	Annotation	gml:id	xs:ID	required	t		documentation The attribute gml:id supports
Name	Type	Use	Default	Fixed	Annotation								
gml:id	xs:ID	required	t		documentation The attribute gml:id supports								

	<p> xlink:type xlink:typeType xlink:href xlink:hrefType xlink:role xlink:roleType xlink:arcrole xlink:arcroleType xlink:title xlink:titleAttrType xlink:show xlink:showType xlink:actuate xlink:actuateType nilReason gml:nilReasonType gml:remoteSchema xs:anyURI </p>	<p> 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. </p> <p> simple </p> <p> appinfo deprecated </p>
<p> annotation </p>	<p> documentation Composition feature association - prototype, under development </p>	

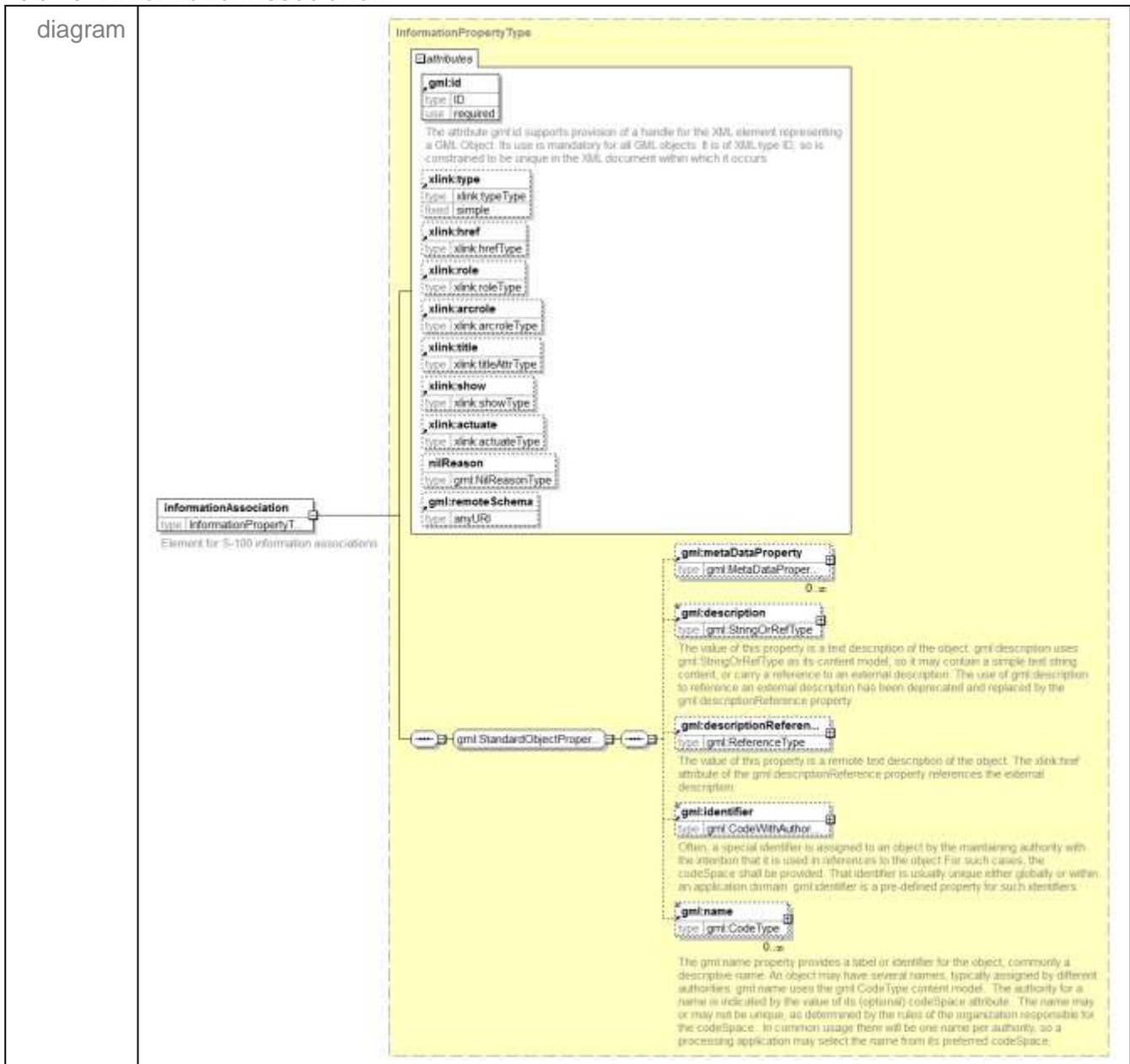
element featureAssociation



type	FeaturePropertyType					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
used by	complexType AbstractS100CollectionFeatureType AbstractS100FeatureType					
attributes	Name	Type	Use	Default	Fixed	Annotation
	<code>gml:id</code>	xs:ID	require	t		documentatio

	<p style="text-align: center;">d</p> <p>xlink:type xlink:typeType</p> <p>xlink:href xlink:hrefType</p> <p>xlink:role xlink:roleType</p> <p>xlink:arcrole xlink:arcroleType</p> <p>xlink:title xlink:titleAttrType</p> <p>xlink:show xlink:showType</p> <p>xlink:actuate xlink:actuateType</p> <p>nilReason gml:nilReasonType</p> <p>gml:remoteSchema xs:anyURI</p>	<p style="text-align: center;">n</p> <p>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.</p> <p style="text-align: center;">simple</p> <p style="text-align: right;">appinfo deprecated</p>
<p>annotation</p>	<p>documentation Element for S-100 feature associations</p>	

element informationAssociation

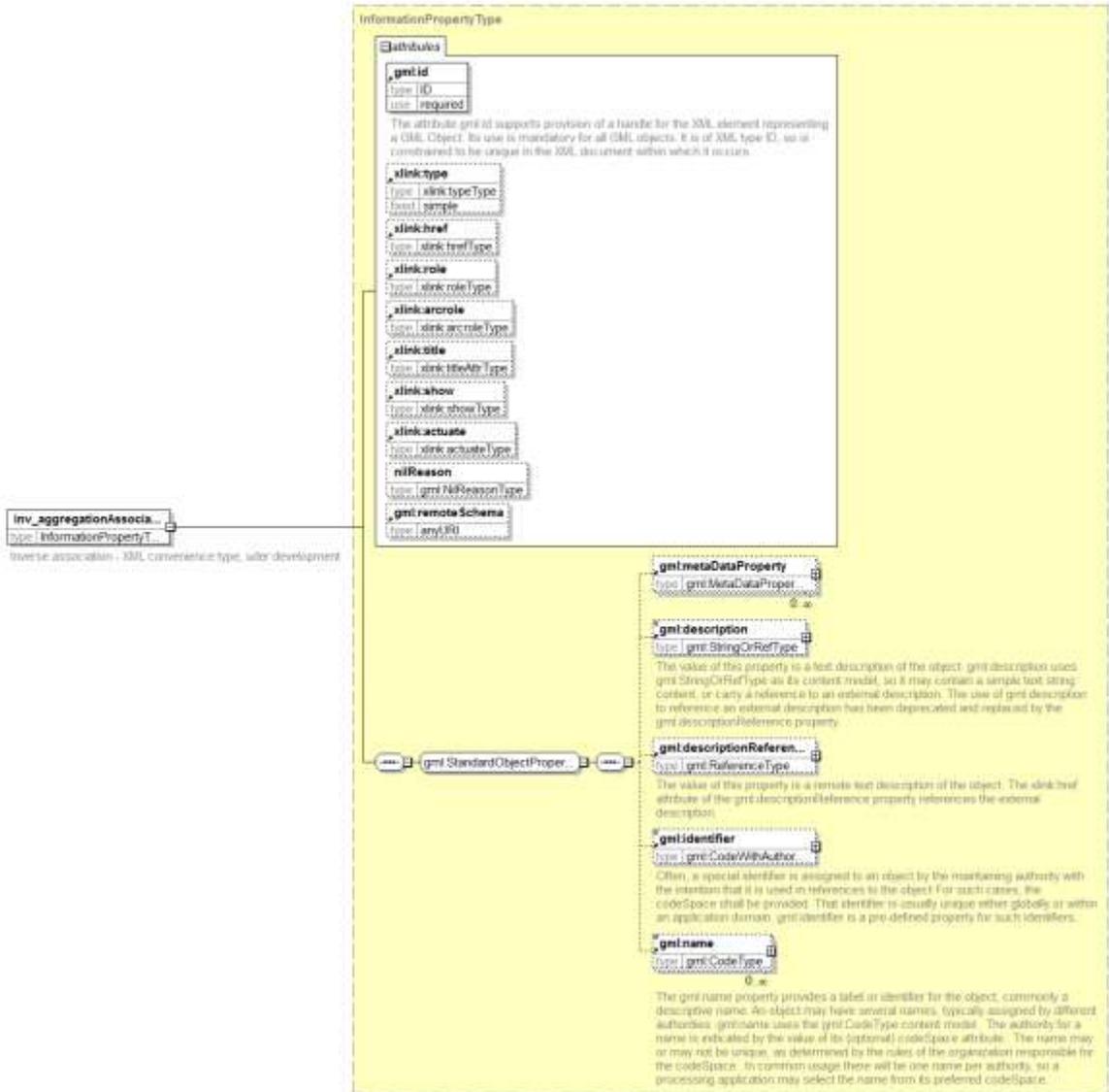


type	InformationPropertyType					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
used by	complexType	AbstractS100CollectionFeatureType AbstractS100FeatureType AbstractS100InformationType				
attributes	Name	Type	Use	Default	Fixed	Annotation
	gml:id	xs:ID	require	t		documentatio

	<p style="text-align: center;">d</p> <p>xlink:type xlink:typeType</p> <p>xlink:href xlink:hrefType</p> <p>xlink:role xlink:roleType</p> <p>xlink:arcrole xlink:arcroleType</p> <p>xlink:title xlink:titleAttrType</p> <p>xlink:show xlink:showType</p> <p>xlink:actuate xlink:actuateType</p> <p>nilReason gml:NilReasonType</p> <p>gml:remoteSchema xs:anyURI</p>	<p style="text-align: center;">n</p> <p>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.</p> <p style="text-align: center;">simple</p> <p style="text-align: right;">appinfo deprecated</p>
<p>annotation</p>	<p>documentation Element for S-100 information associations</p>	

element `inv_aggregationAssociation`

diagram

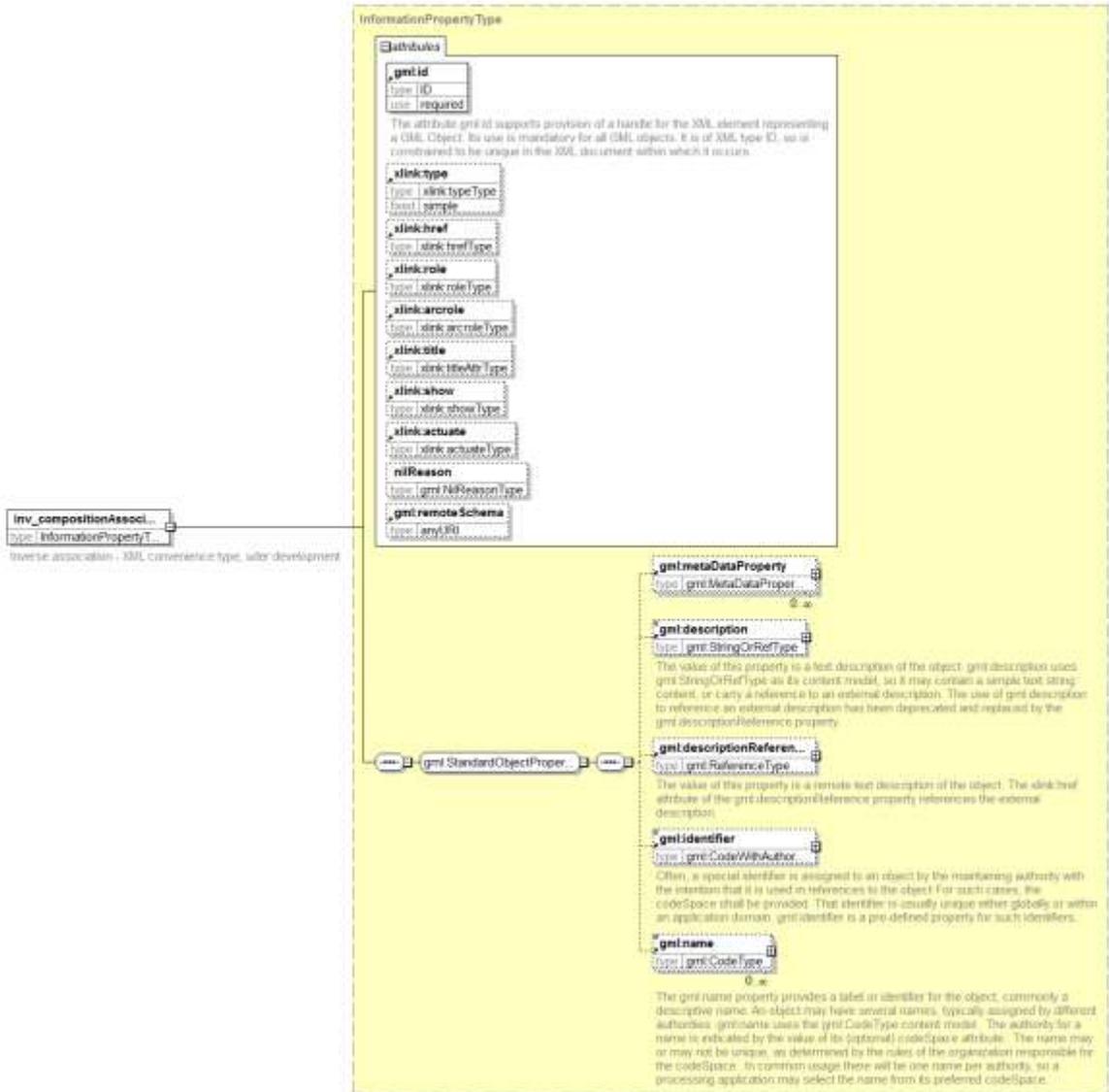


type	InformationPropertyType					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
attributes	Name	Type	Use	Default	Fixed	Annotation
	<code>gml:id</code>	xs:ID	required	t		documentation The attribute <code>gml:id</code> supports provision of a

	<table border="0"> <tr> <td>xlink:type</td> <td>xlink:typeType</td> <td rowspan="10">simple</td> </tr> <tr> <td>xlink:href</td> <td>xlink:hrefType</td> </tr> <tr> <td>xlink:role</td> <td>xlink:roleType</td> </tr> <tr> <td>xlink:arcrole</td> <td>xlink:arcroleType</td> </tr> <tr> <td>xlink:title</td> <td>xlink:titleAttrType</td> </tr> <tr> <td>xlink:show</td> <td>xlink:showType</td> </tr> <tr> <td>xlink:actuate</td> <td>xlink:actuateType</td> </tr> <tr> <td>nilReason</td> <td>gml:nilReasonType</td> </tr> <tr> <td>gml:remoteSchema</td> <td>xs:anyURI</td> </tr> <tr> <td></td> <td></td> </tr> </table>	xlink:type	xlink:typeType	simple	xlink:href	xlink:hrefType	xlink:role	xlink:roleType	xlink:arcrole	xlink:arcroleType	xlink:title	xlink:titleAttrType	xlink:show	xlink:showType	xlink:actuate	xlink:actuateType	nilReason	gml:nilReasonType	gml:remoteSchema	xs:anyURI			<p>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.</p> <p>appinfo deprecated</p>
xlink:type	xlink:typeType	simple																					
xlink:href	xlink:hrefType																						
xlink:role	xlink:roleType																						
xlink:arcrole	xlink:arcroleType																						
xlink:title	xlink:titleAttrType																						
xlink:show	xlink:showType																						
xlink:actuate	xlink:actuateType																						
nilReason	gml:nilReasonType																						
gml:remoteSchema	xs:anyURI																						
<p>annotation</p>	<p>documentation Inverse association - XML convenience type, under development</p>																						

element `inv_compositionAssociation`

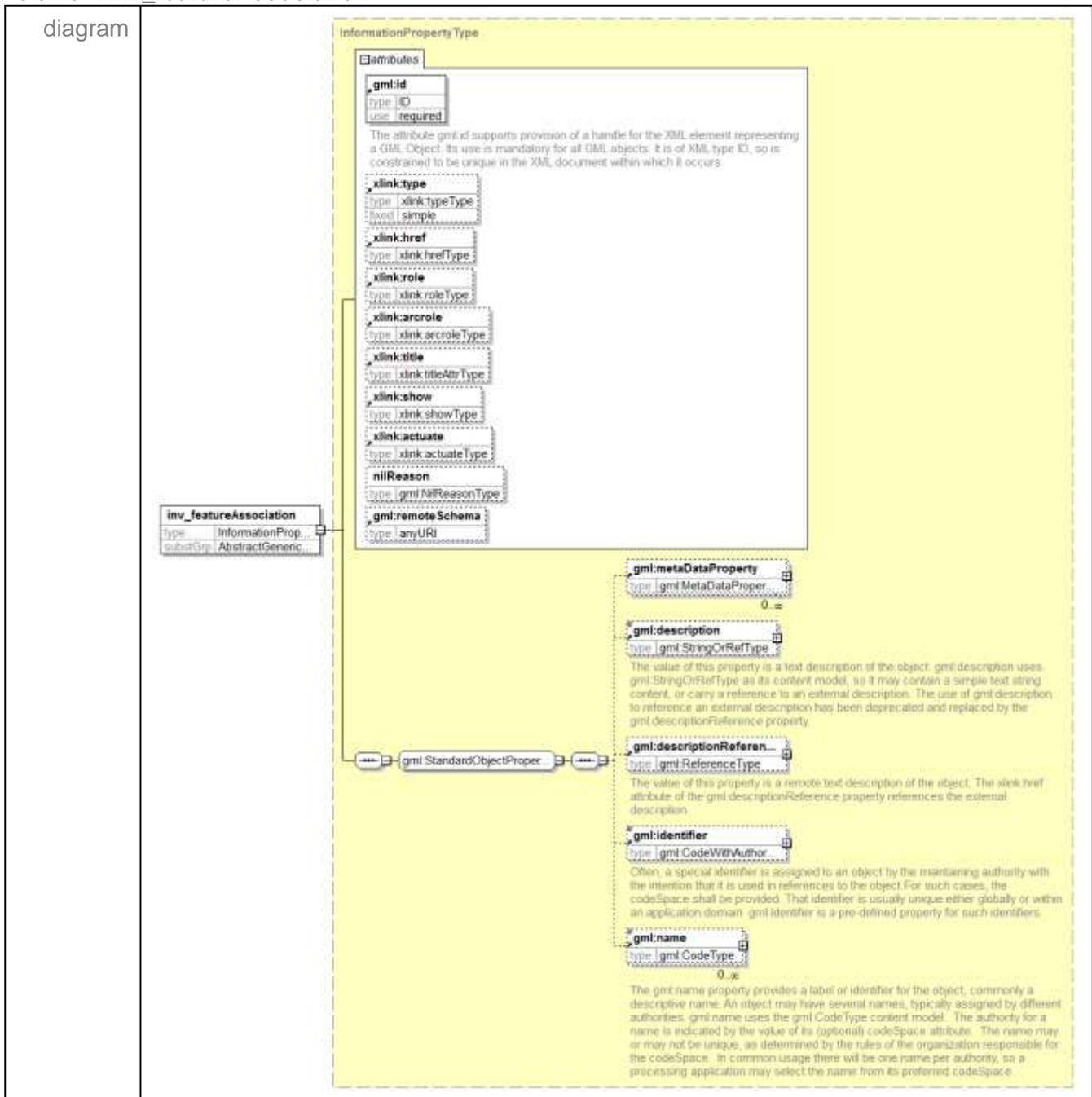
diagram



type	InformationPropertyType					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
attributes	Name	Type	Use	Default	Fixed	Annotation
	<code>gml:id</code>	xs:ID	required	t		documentation The attribute <code>gml:id</code> supports provision of a

	<p> xlink:type xlink:typeType xlink:href xlink:hrefType xlink:role xlink:roleType xlink:arcrole xlink:arcroleType xlink:title xlink:titleAttrType xlink:show xlink:showType xlink:actuate xlink:actuateType nilReason gml:nilReasonType gml:remoteSchema xs:anyURI </p>	<p> 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. </p> <p> simple </p> <p> appinfo deprecated </p>
<p> annotation </p>	<p> documentation Inverse association - XML convenience type, under development </p>	

element **inv_featureAssociation**



type	InformationPropertyType					
substitution group	AbstractGenericApplicationPropertyOfS100Feature					
properties	content complex					
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name					
attributes	Name	Type	Use	Default	Fixed	Annotation

	gml:id	xs:ID	required	documentation
	xlink:type	xlink:typeType	simple	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.
	xlink:href	xlink:hrefType		
	xlink:role	xlink:roleType		
	xlink:arcrole	xlink:arcroleType		
	xlink:title	xlink:titleAttrType		
	xlink:show	xlink:showType		
	xlink:actuate	xlink:actuateType		
	nilReason	gml:nilReasonType		
	gml:remoteSchema	xs:anyURI		appinfo deprecated

element `inv_informationAssociation`

<p>diagram</p>	<p>The diagram illustrates the structure of the <code>InformationPropertyType</code> element. It is defined as an <code>InformationPropertyType</code> with the following attributes and children:</p> <ul style="list-style-type: none"> Attributes: <ul style="list-style-type: none"> <code>gml:id</code>: Type <code>ID</code>, use <code>required</code>. Description: The attribute <code>gml:id</code> 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 <code>ID</code>, so it is constrained to be unique in the XML document within which it occurs. <code>xlink:type</code>: Type <code>xlink:typeType</code>, fixed <code>simple</code>. <code>xlink:href</code>: Type <code>xlink:hrefType</code>. <code>xlink:role</code>: Type <code>xlink:roleType</code>. <code>xlink:arcrole</code>: Type <code>xlink:arcroleType</code>. <code>xlink:title</code>: Type <code>xlink:titleAttrType</code>. <code>xlink:show</code>: Type <code>xlink:showType</code>. <code>xlink:actuate</code>: Type <code>xlink:actuateType</code>. <code>nilReason</code>: Type <code>gml:nilReasonType</code>. <code>gml:remoteSchema</code>: Type <code>anyURI</code>. Children: <ul style="list-style-type: none"> <code>gml:metaDataProperty</code>: Type <code>gml:MetaDataProperty</code>, cardinality <code>0..*</code>. <code>gml:description</code>: Type <code>gml:StringOrRefType</code>. Description: The value of this property is a text description of the object. <code>gml:description</code> uses <code>gml:StringOrRefType</code> as its content model, so it may contain a simple text string content, or carry a reference to an external description. The use of <code>gml:description</code> to reference an external description has been deprecated and replaced by the <code>gml:descriptionReference</code> property. <code>gml:descriptionReference</code>: Type <code>gml:ReferenceType</code>. Description: The value of this property is a remote text description of the object. The <code>xlink:href</code> attribute of the <code>gml:descriptionReference</code> property references the external description. <code>gml:identifier</code>: Type <code>gml:CodeWithAuthor</code>. Description: 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 <code>codeSpace</code> shall be provided. That identifier is usually unique either globally or within an application domain. <code>gml:identifier</code> is a pre-defined property for such identifiers. <code>gml:name</code>: Type <code>gml:CodeType</code>, cardinality <code>0..*</code>. Description: The <code>gml:name</code> property provides a label or identifier for the object, commonly a descriptive name. An object may have several names, typically assigned by different authorities. <code>gml:name</code> uses the <code>gml:CodeType</code> content model. The authority for a name is indicated by the value of its (optional) <code>codeSpace</code> attribute. The name may or may not be unique, as determined by the rules of the organization responsible for the <code>codeSpace</code>. In common usage there will be one name per authority, so a processing application may select the name from its preferred <code>codeSpace</code>.
type	InformationPropertyType
substitution group	AbstractGenericApplicationPropertyOfS100Feature
properties	content complex
children	gml:metaDataProperty gml:description gml:descriptionReference gml:identifier gml:name
used by	complexType AbstractS100InformationType

attributes	Name	Type	Use	Default	Fixed	Annotation
	gml:id	xs:ID	required			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.
	xlink:type	xlink:typeType			simple	
	xlink:href	xlink:hrefType				
	xlink:role	xlink:roleType				
	xlink:arcrole	xlink:arcroleType				
	xlink:title	xlink:titleAttrType				
	xlink:show	xlink:showType				
	xlink:actuate	xlink:actuateType				
	nilReason	gml:nilReasonType				
	gml:remoteSchema	xs:anyURI				appinfo deprecated