

# Schema documentation for S100\_IC.xsd

july 21, 2016

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## Schema(s)

### Main schema s100\_IC.xsd

Properties	<table border="1"> <tr><td>attribute form default:</td><td>unqualified</td></tr> <tr><td>element form default:</td><td>unqualified</td></tr> <tr><td>version:</td><td>0.4</td></tr> </table>	attribute form default:	unqualified	element form default:	unqualified	version:	0.4
attribute form default:	unqualified						
element form default:	unqualified						
version:	0.4						

## Element(s)

### Element S100\_CataloguePointofContact / organization

Annotations	The organization distributing this exchange catalogue' This could be an individual producer, value added reseller, etc.				
Diagram	<pre> classDiagram     class organization {         xs:string     }     organization "1" -- "1" xs:string     organization &lt; -- "The organization distributing this exchange catalogue' This could be an individual producer, value added reseller, etc."     xs:string &lt; -- "Built-in primitive type. The string datatype represents character strings in XML."   </pre> <p>The diagram shows a UML class named 'organization'. It has one attribute, 'xs:string', indicated by a box with a checkmark icon. A note below the class says 'The organization distributing this exchange catalogue' and 'This could be an individual producer, value added reseller, etc.'. A note next to the attribute says 'Built-in primitive type. The string datatype represents character strings in XML.'</p>				
Type	xs:string				
Properties	<table border="1"> <tr><td>content:</td><td>simple</td></tr> <tr><td>minOccurs:</td><td>1</td></tr> </table>	content:	simple	minOccurs:	1
content:	simple				
minOccurs:	1				

	maxOccurs: 1
Source	<pre>&lt;xs:element name="organization" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The organization distributing this exchange catalogue' This could be an individual producer, value added reseller, etc.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_CataloguePointofContact / phone

Annotations	The phone number of the organization.						
Diagram							
Type	xs:string						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre>&lt;xs:element name="phone" type="xs:string" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The phone number of the organization.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>						

## Element s100\_CataloguePointofContact / address

Annotations	The address of the organization.						
Diagram							
Type	xs:string						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre>&lt;xs:element name="address" type="xs:string" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The address of the organization.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>						

## Element s100\_IC\_Feature / featureCode

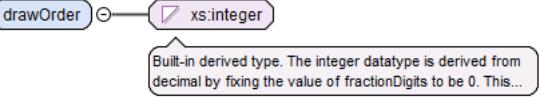
Diagram							
Type	xs:string						
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre>&lt;xs:element name="featureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;</pre>						

## Element s100\_IC\_Feature / product

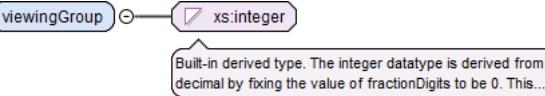
Diagram	
---------	--

Type	dataProduct	
Properties	content:	simple
	minOccurs:	1
	maxOccurs:	1
Facets	enumeration	S-101
	enumeration	S-102
	enumeration	S-111
	enumeration	S-112
	enumeration	S-122
	enumeration	S-124
	enumeration	S-411
	enumeration	S-412
	enumeration	HYBRID
		Hybridized features created during interoperability processing
Source	<xs:element name="product" type="dataProduct" minOccurs="1" maxOccurs="1"/>	

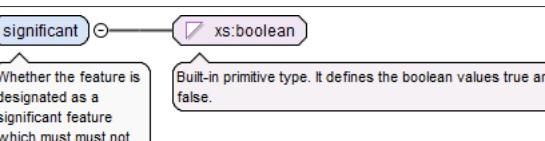
## Element S100\_IC\_Feature / drawOrder

Diagram	
Type	xs:integer
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Source	<xs:element name="drawOrder" type="xs:integer" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_Feature / viewingGroup

Diagram	
Type	xs:integer
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Source	<xs:element name="viewingGroup" type="xs:integer" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_Feature / significant

Annotations	Whether the feature is designated as a significant feature which must not be displayed less prominently than less significant features in other overlying datasets. Remark: true=feature is designated as a significant feature
Diagram	
Type	xs:boolean
Properties	content: simple

	minOccurs: 1 maxOccurs: 1 default: false
Source	<pre>&lt;xs:element name="significant" type="xs:boolean" default="false" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Whether the feature is designated as a significant feature which must be displayed less prominently than less significant features in other overlying datasets. Remark: true=feature is designated as a significant feature&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_IC\_PredefinedCombination / identifier

Annotations	Identifier of the predefined combination
Diagram	
Type	xs:string
Properties	content: simple
Source	<pre>&lt;xs:element name="identifier" type="xs:string"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Identifier of the predefined combination&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_IC\_PredefinedCombination / name

Annotations	Name of combination
Diagram	
Type	xs:string
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Source	<pre>&lt;xs:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Name of combination&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_IC\_PredefinedCombination / description

Annotations	Brief description of combination
Diagram	
Type	xs:string
Properties	content: simple
	minOccurs: 1
	maxOccurs: 1
Source	<pre>&lt;xs:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Brief description of combination&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_IC\_PredefinedCombination / useConditions

Annotations	Conditions for which the combination is designed						
Diagram	<pre> classDiagram     useConditions "1.."     useConditions --&gt; xsString     xsString "xs:string"     </pre> <p>useConditions Conditions for which the combination is designed</p> <p>xsString Built-in primitive type. The string datatype represents character strings in XML.</p>						
Type	xs:string						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> &lt;xss:element name="useConditions" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xss:annotation&gt;     &lt;xss:documentation&gt;Conditions for which the combination is designed&lt;/xss:documentation&gt;   &lt;/xss:annotation&gt; &lt;/xss:element&gt; </pre>						

## Element s100\_IC\_PredefinedCombination / interoperabilityLevel

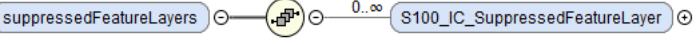
Annotations	The highest level of interoperability functionality encoded within an instance of this type						
Diagram	<pre> classDiagram     interoperabilityLevel "1.."     interoperabilityLevel --&gt; xsInteger     xsInteger "xs:integer"     </pre> <p>interoperabilityLevel The highest level of interoperability functionality encoded within an instance of this type</p> <p>xsInteger Built-in derived type. The integer datatype is derived from decimal by fixing the value of fractionDigits to be 0. This...</p>						
Type	xs:integer						
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre> &lt;xss:element name="interoperabilityLevel" type="xs:integer" minOccurs="1" maxOccurs="1"&gt;   &lt;xss:annotation&gt;     &lt;xss:documentation&gt;The highest level of interoperability functionality encoded within an instance of this type&lt;/xss:documentation&gt;   &lt;/xss:annotation&gt; &lt;/xss:element&gt; </pre>						

## Element s100\_IC\_PredefinedCombination / includedProduct

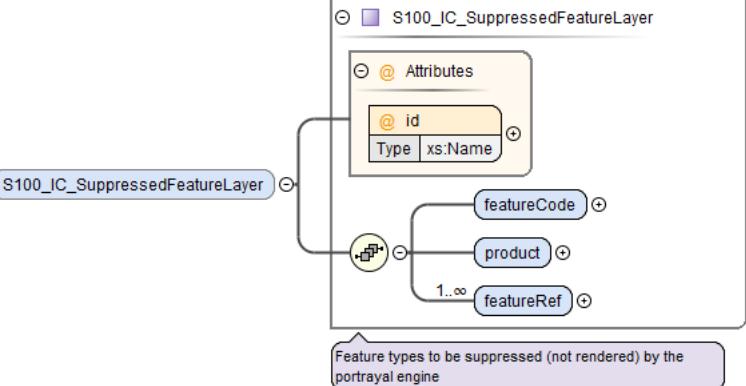
Annotations	Products recommended to be active in this mode																
Diagram	<pre> classDiagram     includedProduct "1.."     includedProduct --&gt; dataProduct     dataProduct "dataProduct"     dataProduct --&gt; Derivation     dataProduct --&gt; restriction     dataProduct --&gt; Base Type     dataProduct --&gt; xsString     </pre> <p>includedProduct Products recommended to be active in this mode</p> <p>dataProduct Derivation   restriction</p> <p>Base Type xs:string</p>																
Type	dataProduct																
Properties	<table> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>2</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	simple	minOccurs:	2	maxOccurs:	unbounded										
content:	simple																
minOccurs:	2																
maxOccurs:	unbounded																
Facets	<table> <tr> <td>enumeration</td> <td>S-101</td> </tr> <tr> <td>enumeration</td> <td>S-102</td> </tr> <tr> <td>enumeration</td> <td>S-111</td> </tr> <tr> <td>enumeration</td> <td>S-112</td> </tr> <tr> <td>enumeration</td> <td>S-122</td> </tr> <tr> <td>enumeration</td> <td>S-124</td> </tr> <tr> <td>enumeration</td> <td>S-411</td> </tr> <tr> <td>enumeration</td> <td>S-412</td> </tr> </table>	enumeration	S-101	enumeration	S-102	enumeration	S-111	enumeration	S-112	enumeration	S-122	enumeration	S-124	enumeration	S-411	enumeration	S-412
enumeration	S-101																
enumeration	S-102																
enumeration	S-111																
enumeration	S-112																
enumeration	S-122																
enumeration	S-124																
enumeration	S-411																
enumeration	S-412																

	enumeration	HYBRID	Hybridized features created during interoperability processing
Source			<pre>&lt;xs:element name="includedProduct" type="dataProduct" minOccurs="2" maxOccurs="unbounded"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Products recommended to be active in this mode&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

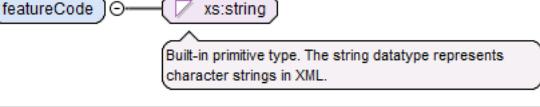
## Element S100\_IC\_PredefinedCombination / suppressedFeatureLayers

Diagram	
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Children	S100_IC_SuppressedFeatureLayer
Source	<pre>&lt;xs:element name="suppressedFeatureLayers" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element name="S100_IC_SuppressedFeatureLayer" type="S100_IC_SuppressedFeatureLayer" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;/xs:sequence&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>

## Element S100\_IC\_PredefinedCombination / suppressedFeatureLayers / S100\_IC\_SuppressedFeatureLayer

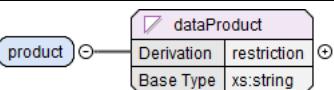
Diagram							
Type	S100_IC_SuppressedFeatureLayer						
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>						
Children	featureCode, featureRef, product						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre>&lt;xs:element name="S100_IC_SuppressedFeatureLayer" type="S100_IC_SuppressedFeatureLayer" minOccurs="0" maxOccurs="unbounded"/&gt;</pre>						

## Element S100\_IC\_SuppressedFeatureLayer / featureCode

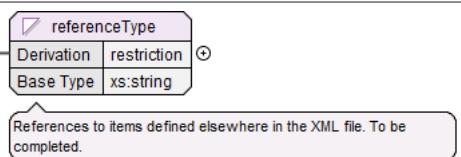
Diagram	
Type	xs:string

Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="featureCode" type="xs:string" minOccurs="1" maxOccurs="1"/>

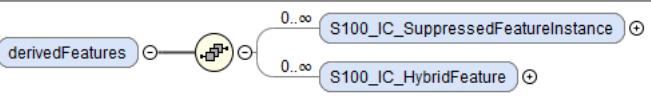
**Element s100\_IC\_SuppressedFeatureLayer / product**

Diagram	
Type	dataProduct
Properties	content: simple minOccurs: 1 maxOccurs: 1
Facets	enumeration S-101 enumeration S-102 enumeration S-111 enumeration S-112 enumeration S-122 enumeration S-124 enumeration S-411 enumeration S-412 enumeration HYBRID      Hybridized features created during interoperability processing
Source	<xss:element name="product" type="dataProduct" minOccurs="1" maxOccurs="1"/>

**Element s100\_IC\_SuppressedFeatureLayer / featureRef**

Diagram	
Type	referenceType
Properties	content: simple minOccurs: 1 maxOccurs: unbounded
Source	<xss:element name="featureRef" type="referenceType" minOccurs="1" maxOccurs="unbounded"/>

**Element s100\_IC\_PredefinedCombination / derivedFeatures**

Diagram	
Properties	content: complex minOccurs: 0 maxOccurs: 1
Children	S100_IC_HybridFeature, S100_IC_SuppressedFeatureInstance
Source	<xss:element name="derivedFeatures" minOccurs="0" maxOccurs="1"> <xss:complexType> <xss:sequence> <xss:element name="S100_IC_SuppressedFeatureInstance" type="S100_IC_SuppressedFeatureInstance" minOccurs="0" maxOccurs="unbounded"/>

```

<xs:element name="S100_IC_HybridFeature" type="S100_IC_HybridFeature" minOccurs="0"
maxOccurs="unbounded" />
  </xs:sequence>
</xs:complexType>
</xs:element>

```

## Element S100\_IC\_PredefinedCombination / derivedFeatures / S100\_IC\_SuppressedFeatureInstance

Diagram	<p>S100_IC_SuppressedFeatureInstance</p> <p>Base Type: S100_IC_FeatureDerivation</p> <p>Content: complex</p> <p>Attributes:</p> <ul style="list-style-type: none"> <li>@ id (xs:Name)</li> <li>primaryProduct</li> <li>primaryFeatureCode</li> <li>primarySelector</li> <li>secondaryProduct</li> <li>secondaryFeatureCode</li> <li>secondarySelector</li> <li>outputProduct</li> <li>outputFeatureCode</li> <li>featureRef</li> </ul> <p>The output product. Normally indicates the hypothetical "hybrid" product.</p> <p>Derived features are created by consolidating features from 2 or more different products into one final view, so the...</p>						
Type	S100_IC_SuppressedFeatureInstance						
Type hierarchy	<ul style="list-style-type: none"> <li>S100_IC_FeatureDerivation</li> <li>S100_IC_SuppressedFeatureInstance</li> </ul>						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	featureRef, outputFeatureCode, outputProduct, primaryFeatureCode, primaryProduct, primarySelector, secondaryFeatureCode, secondaryProduct, secondarySelector						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre> &lt;xs:element name="S100_IC_SuppressedFeatureInstance" type="S100_IC_SuppressedFeatureInstance" minOccurs="0" maxOccurs="unbounded" /&gt; </pre>						

## Element S100\_IC\_FeatureDerivation / primaryProduct

Diagram	<p>primaryProduct</p> <p>dataProduct</p> <p>Derivation   restriction</p> <p>Base Type: xs:string</p>
---------	--

Type	dataProduct	
Properties	content:	simple
	minOccurs:	1
	maxOccurs:	1
Facets	enumeration	S-101
	enumeration	S-102
	enumeration	S-111
	enumeration	S-112
	enumeration	S-122
	enumeration	S-124
	enumeration	S-411
	enumeration	S-412
	enumeration	HYBRID
		Hybridized features created during interoperability processing
Source	<xss:element name="primaryProduct" type="dataProduct" minOccurs="1" maxOccurs="1"/>	

## Element S100\_IC\_FeatureDerivation / primaryFeatureCode

Diagram	<pre> classDiagram     class primaryFeatureCode {         &lt;&lt;xs:string&gt;&gt;     }     xs:string &lt; -- primaryFeatureCode   </pre> <p>Built-in primitive type. The string datatype represents character strings in XML.</p>
Type	xs:string
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xss:element name="primaryFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_FeatureDerivation / primarySelector

Diagram	<pre> classDiagram     class primarySelector {         &lt;&lt;FeatureSelector&gt;&gt;         &lt;&lt;Derivation   restriction&gt;&gt;         &lt;&lt;Base Type   xs:string&gt;&gt;     }     FeatureSelector &lt; -- primarySelector     xs:string &lt; -- FeatureSelector   </pre> <p>A template, logical expression, or match condition that, given a feature instance as parameter, can be evaluated to...</p>
Type	FeatureSelector
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xss:element name="primarySelector" type="FeatureSelector" minOccurs="0" maxOccurs="1"/>

## Element S100\_IC\_FeatureDerivation / secondaryProduct

Diagram	<pre> classDiagram     class secondaryProduct {         &lt;&lt;dataProduct&gt;&gt;         &lt;&lt;Derivation   restriction&gt;&gt;         &lt;&lt;Base Type   xs:string&gt;&gt;     }     dataProduct &lt; -- secondaryProduct     xs:string &lt; -- dataProduct   </pre>
Type	dataProduct
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Facets	enumeration S-101

	enumeration	S-102	
	enumeration	S-111	
	enumeration	S-112	
	enumeration	S-122	
	enumeration	S-124	
	enumeration	S-411	
	enumeration	S-412	
	enumeration	HYBRID	Hybridized features created during interoperability processing
Source	<xs:element name="secondaryProduct" type="dataProduct" minOccurs="1" maxOccurs="1"/>		

## Element S100\_IC\_FeatureDerivation / secondaryFeatureCode

Diagram	<p>secondaryFeatureCode → xs:string</p> <p>Built-in primitive type. The string datatype represents character strings in XML.</p>
Type	xs:string
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<xs:element name="secondaryFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_FeatureDerivation / secondarySelector

Diagram	<p>secondarySelector → FeatureSelector</p> <p>Derivation   restriction</p> <p>Base Type xs:string</p> <p>A template, logical expression, or match condition that, given a feature instance as parameter, can be evaluated to...</p>
Type	FeatureSelector
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<xs:element name="secondarySelector" type="FeatureSelector" minOccurs="0" maxOccurs="1"/>

## Element S100\_IC\_FeatureDerivation / outputProduct

Annotations	The output product. Normally indicates the hypothetical "hybrid" product.
Diagram	<p>outputProduct → dataProduct</p> <p>Derivation   restriction</p> <p>Base Type xs:string</p> <p>The output product. Normally indicates the hypothetical "hybrid" product.</p>
Type	dataProduct
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Facets	<p>enumeration S-101</p> <p>enumeration S-102</p> <p>enumeration S-111</p>

	enumeration	S-112	
	enumeration	S-122	
	enumeration	S-124	
	enumeration	S-411	
	enumeration	S-412	
	enumeration	HYBRID	Hybridized features created during interoperability processing
Source	<pre>&lt;xss:element name="outputProduct" type="dataProduct" minOccurs="1" maxOccurs="1"&gt;   &lt;xss:annotation&gt;     &lt;xss:documentation&gt;The output product. Normally indicates the hypothetical "hybrid" product.&lt;/xss:documentation&gt;   &lt;/xss:annotation&gt; &lt;/xss:element&gt;</pre>		

## Element S100\_IC\_FeatureDerivation / outputFeatureCode

Diagram	<pre> graph LR     OFC[outputFeatureCode] --&gt; xs:string  X     X --- Note["Built-in primitive type. The string datatype represents character strings in XML."]   </pre>
Type	xs:string
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<pre>&lt;xss:element name="outputFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;</pre>

## Element S100\_IC\_FeatureDerivation / featureRef

Diagram	<pre> graph LR     FR[featureRef] --&gt; referenceType  RT     subgraph RT       direction TB       R[Derivation]       RS[restriction]       BT[Base Type]       ST[xs:string]       R --- RS       RS --- BT       BT --- ST     end     Note["References to items defined elsewhere in the XML file. To be completed."]   </pre>
Type	referenceType
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<pre>&lt;xss:element name="featureRef" type="referenceType" minOccurs="1" maxOccurs="1"/&gt;</pre>

## Element S100\_IC\_PredefinedCombination / derivedFeatures / S100\_IC\_HybridFeature

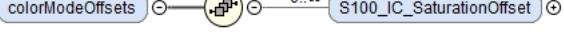
Diagram	<pre> classDiagram     class S100_IC_HybridFeature {         &lt;&lt;Base Type: S100_IC_FeatureDerivation&gt;&gt;         &lt;&lt;Content: complex&gt;&gt;         &lt;&lt;Attributes: id, primaryProduct, primaryFeatureCode, primarySelector, secondaryProduct, secondaryFeatureCode, secondarySelector, outputProduct, outputFeatureCode, featureRef, creationRule&gt;&gt;         &lt;&lt;Note: Derived features are created by consolidating features from 2 or more different products into one final view, so the...&gt;&gt;     }     class S100_IC_FeatureDerivation {         &lt;&lt;Abstract: true&gt;&gt;         &lt;&lt;Attributes: id&gt;&gt;     } </pre>						
Type	S100_IC_HybridFeature						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_FeatureDerivation</li> <li>• S100_IC_HybridFeature</li> </ul>						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	creationRule, featureRef, outputFeatureCode, outputProduct, primaryFeatureCode, primaryProduct, primarySelector, secondaryFeatureCode, secondaryProduct, secondarySelector						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre>&lt;xss:element name="S100_IC_HybridFeature" type="S100_IC_HybridFeature" minOccurs="0" maxOccurs="unbounded" /&gt;</pre>						

## Element S100\_IC\_HybridFeature / creationRule

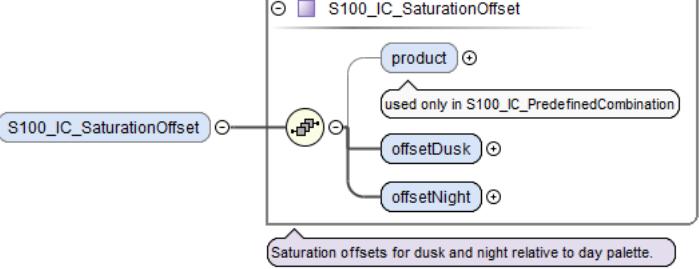
Diagram	<pre> classDiagram     class creationRule {         &lt;&lt;referenceType: Derivation, restriction, Base Type: xs:string&gt;&gt;         &lt;&lt;Note: References to items defined elsewhere in the XML file. To be completed.&gt;&gt;     } </pre>
Type	referenceType
Properties	content: simple

	minOccurs:	1
	maxOccurs:	1
Source	<xss:element name="creationRule" type="referenceType" minOccurs="1" maxOccurs="1"/>	

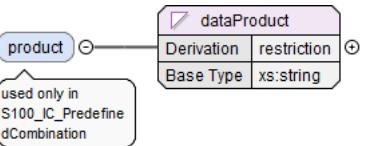
## Element S100\_IC\_PredefinedCombination / colorModeOffsets

Diagram	
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Children	S100_IC_SaturationOffset
Source	<pre>&lt;xss:element name="colorModeOffsets" minOccurs="0" maxOccurs="1"&gt;   &lt;xss:complexType&gt;     &lt;xss:sequence&gt;       &lt;xss:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset" minOccurs="0"         maxOccurs="unbounded"/&gt;     &lt;/xss:sequence&gt;   &lt;/xss:complexType&gt; &lt;/xss:element&gt;</pre>

## Element S100\_IC\_PredefinedCombination / colorModeOffsets / S100\_IC\_SaturationOffset

Diagram	
Type	S100_IC_SaturationOffset
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: unbounded</p>
Children	offsetDusk, offsetNight, product
Source	<pre>&lt;xss:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset" minOccurs="0"   maxOccurs="unbounded"/&gt;</pre>

## Element S100\_IC\_SaturationOffset / product

Annotations	used only in S100_IC_PredefinedCombination
Diagram	
Type	dataProduct
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Facets	enumeration S-101

	enumeration	S-102	
	enumeration	S-111	
	enumeration	S-112	
	enumeration	S-122	
	enumeration	S-124	
	enumeration	S-411	
	enumeration	S-412	
	enumeration	HYBRID	Hybridized features created during interoperability processing
Source	<pre>&lt;xs:element name="product" type="dataProduct" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;used only in S100_IC_PredefinedCombination&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>		

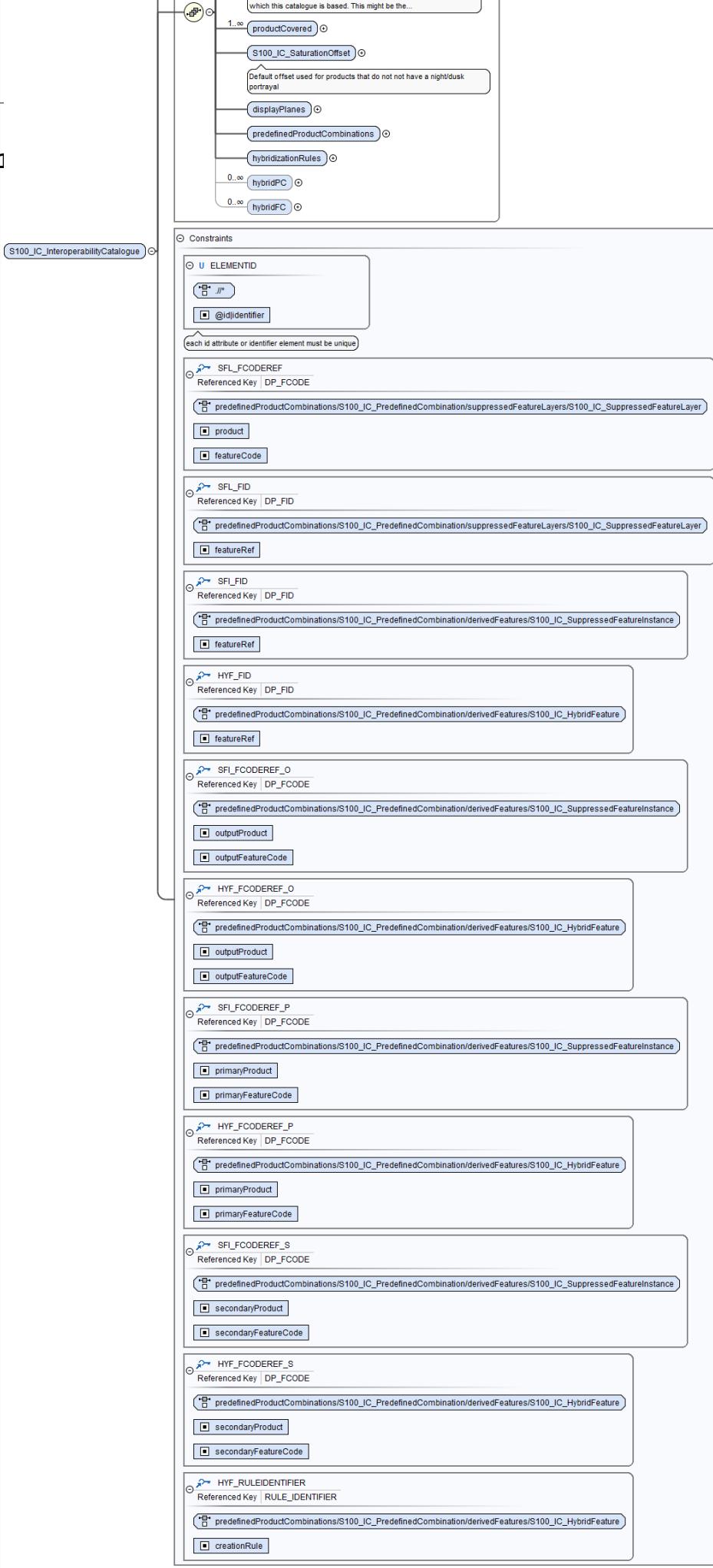
## Element S100\_IC\_SaturationOffset / offsetDusk

Diagram	<pre> classDiagram     class offsetDusk {         &lt;&lt;restricts: xs:decimal&gt;&gt;         &lt;&lt;Derivation&gt;&gt;         &lt;&lt;restriction&gt;&gt;         &lt;&lt;Base Type&gt;&gt; xs:decimal     }   </pre>
Type	restriction of xs:decimal
Properties	content: simple minOccurs: 1 maxOccurs: 1
Facets	maxInclusive 1.0 minInclusive 0.0
Source	<pre>&lt;xs:element name="offsetDusk" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:simpleType&gt;     &lt;xs:restriction base="xs:decimal"&gt;       &lt;xs:minInclusive value="0.0"/&gt;       &lt;xs:maxInclusive value="1.0"/&gt;     &lt;/xs:restriction&gt;   &lt;/xs:simpleType&gt; &lt;/xs:element&gt;</pre>

## Element S100\_IC\_SaturationOffset / offsetNight

Diagram	<pre> classDiagram     class offsetNight {         &lt;&lt;restricts: xs:decimal&gt;&gt;         &lt;&lt;Derivation&gt;&gt;         &lt;&lt;restriction&gt;&gt;         &lt;&lt;Base Type&gt;&gt; xs:decimal     }   </pre>
Type	restriction of xs:decimal
Properties	content: simple minOccurs: 1 maxOccurs: 1
Facets	maxInclusive 1.0 minInclusive 0.0
Source	<pre>&lt;xs:element name="offsetNight" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:simpleType&gt;     &lt;xs:restriction base="xs:decimal"&gt;       &lt;xs:minInclusive value="0.0"/&gt;       &lt;xs:maxInclusive value="1.0"/&gt;     &lt;/xs:restriction&gt;   &lt;/xs:simpleType&gt; &lt;/xs:element&gt;</pre>

## Element S100\_IC\_InteroperabilityCatalogue



Type	S100_IC_InteroperabilityCatalogue
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_Catalogue</li> <li>• S100_IC_InteroperabilityCatalogue</li> </ul>
Properties	content: complex
Children	S100_IC_SaturationOffset, characterSet, comment, description, digitalSignatureReference, digitalSignatureValue, displayPlanes, fieldOfApplication, hybridFC, hybridPC, hybridizationRules, language, locale, name, predefinedProductCombinations, productCovered, requirementDescription, requirementType, scope, versionDate, versionNumber
Source	<pre> &lt;xs:element name="S100_IC_InteroperabilityCatalogue" type="S100_IC_InteroperabilityCatalogue"&gt;   &lt;xs:unique name="ELEMENTID"&gt;     &lt;xs:annotation&gt;       &lt;xs:documentation&gt;each id attribute or identifier element must be unique&lt;/xs:documentation&gt;     &lt;/xs:annotation&gt;     &lt;xs:selector xpath=".///*"/&gt;     &lt;xs:field xpath="@id identifier"/&gt;   &lt;/xs:unique&gt;   &lt;xs:keyref refer="DP_FCODE" name="SFL_FCODEREF"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/ suppressedFeatureLayers/S100_IC_SuppressedFeatureLayer"/&gt;     &lt;xs:field xpath="product"/&gt;     &lt;xs:field xpath="featureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FID" name="SFL_FID"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/ suppressedFeatureLayers/S100_IC_SuppressedFeatureLayer"/&gt;     &lt;xs:field xpath="featureRef"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FID" name="SFI_FID"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_SuppressedFeatureInstance"/&gt;     &lt;xs:field xpath="featureRef"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FID" name="HYF_FID"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_HybridFeature"/&gt;     &lt;xs:field xpath="featureRef"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="SFI_FCODEREF_O"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_SuppressedFeatureInstance"/&gt;     &lt;xs:field xpath="outputProduct"/&gt;     &lt;xs:field xpath="outputFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="HYF_FCODEREF_O"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_HybridFeature"/&gt;     &lt;xs:field xpath="outputProduct"/&gt;     &lt;xs:field xpath="outputFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="SFI_FCODEREF_P"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_SuppressedFeatureInstance"/&gt;     &lt;xs:field xpath="primaryProduct"/&gt;     &lt;xs:field xpath="primaryFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="HYF_FCODEREF_P"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_HybridFeature"/&gt;     &lt;xs:field xpath="primaryProduct"/&gt;     &lt;xs:field xpath="primaryFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="SFI_FCODEREF_S"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_SuppressedFeatureInstance"/&gt;     &lt;xs:field xpath="secondaryProduct"/&gt;     &lt;xs:field xpath="secondaryFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="DP_FCODE" name="HYF_FCODEREF_S"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_HybridFeature"/&gt;     &lt;xs:field xpath="secondaryProduct"/&gt;     &lt;xs:field xpath="secondaryFeatureCode"/&gt;   &lt;/xs:keyref&gt;   &lt;xs:keyref refer="RULE_IDENTIFIER" name="HYF_RULEIDENTIFIER"&gt;     &lt;xs:selector xpath="predefinedProductCombinations/S100_IC_PredefinedCombination/derivedFeatures/ S100_IC_HybridFeature"/&gt;     &lt;xs:field xpath="creationRule"/&gt;   &lt;/xs:keyref&gt;</pre>

<pre>&lt;/xs:element&gt;</pre>
--------------------------------

## Element s100\_Catalogue / name

Annotations	The name for the catalogue						
Diagram	<p>The diagram shows a rounded rectangle labeled "name" with a hollow circle to its right, indicating multiplicity. A line connects "name" to another rounded rectangle labeled "xs:string". Below "name" is a callout box containing "The name for the catalogue". Below "xs:string" is a callout box containing "Built-in primitive type. The string datatype represents character strings in XML."</p>						
Type	xs:string						
Properties	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">content:</td> <td style="padding: 2px;">simple</td> </tr> <tr> <td style="padding: 2px;">minOccurs:</td> <td style="padding: 2px;">1</td> </tr> <tr> <td style="padding: 2px;">maxOccurs:</td> <td style="padding: 2px;">1</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	1
content:	simple						
minOccurs:	1						
maxOccurs:	1						
Source	<pre>&lt;xs:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The name for the catalogue&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>						

## Element s100\_Catalogue / scope

Annotations	Subject domain of the catalogue.						
Diagram	<p>The diagram shows a rounded rectangle labeled "scope" with a hollow circle to its right, indicating multiplicity. A line connects "scope" to another rounded rectangle labeled "xs:string". Below "scope" is a callout box containing "Subject domain of the catalogue.". Below "xs:string" is a callout box containing "Built-in primitive type. The string datatype represents character strings in XML."</p>						
Type	xs:string						
Properties	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">content:</td> <td style="padding: 2px;">simple</td> </tr> <tr> <td style="padding: 2px;">minOccurs:</td> <td style="padding: 2px;">1</td> </tr> <tr> <td style="padding: 2px;">maxOccurs:</td> <td style="padding: 2px;">unbounded</td> </tr> </table>	content:	simple	minOccurs:	1	maxOccurs:	unbounded
content:	simple						
minOccurs:	1						
maxOccurs:	unbounded						
Source	<pre>&lt;xs:element name="scope" type="xs:string" minOccurs="1" maxOccurs="unbounded"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Subject domain of the catalogue.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>						

## Element s100\_Catalogue / fieldOfApplication

Annotations	Description of the use to which this catalogue may be put.						
Diagram	<p>The diagram shows a rounded rectangle labeled "fieldOfApplication" with a hollow circle to its right, indicating multiplicity. A line connects "fieldOfApplication" to another rounded rectangle labeled "xs:string". Below "fieldOfApplication" is a callout box containing "Description of the use to which this catalogue may be put.". Below "xs:string" is a callout box containing "Built-in primitive type. The string datatype represents character strings in XML."</p>						
Type	xs:string						
Properties	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">content:</td> <td style="padding: 2px;">simple</td> </tr> <tr> <td style="padding: 2px;">minOccurs:</td> <td style="padding: 2px;">0</td> </tr> <tr> <td style="padding: 2px;">maxOccurs:</td> <td style="padding: 2px;">1</td> </tr> </table>	content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple						
minOccurs:	0						
maxOccurs:	1						
Source	<pre>&lt;xs:element name="fieldOfApplication" type="xs:string" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Description of the use to which this catalogue may be put.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>						

## Element s100\_Catalogue / versionNumber

Annotations	The version number of the product specification.
Diagram	<p>The diagram shows a rounded rectangle labeled "versionNumber" with a hollow circle to its right, indicating multiplicity. A line connects "versionNumber" to another rounded rectangle labeled "xs:string". Below "versionNumber" is a callout box containing "The version number of the product specification.". Below "xs:string" is a callout box containing "Built-in primitive type. The string datatype represents character strings in XML."</p>

Type	xs:string
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<pre>&lt;xs:element name="versionNumber" type="xs:string" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The version number of the product specification.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_Catalogue / versionDate

Annotations	The version date of the product specification.
Diagram	<p>The diagram shows a directed association between the <code>versionDate</code> element and the <code>gco:Date_Type</code> element. A callout box indicates that <code>versionDate</code> is "The version date of the product specification." Another callout box indicates that <code>gco:Date_Type</code> is "A Date object." A third callout box indicates that <code>gco:Date_Type</code> is "The version date of the product specification."</p>
Type	gco:Date_Type
Properties	<p>content: simple</p> <p>minOccurs: 1</p> <p>maxOccurs: 1</p>
Source	<pre>&lt;xs:element name="versionDate" type="gco:Date_Type" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The version date of the product specification.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_Catalogue / language

Annotations	The language used for this catalogue.
Diagram	<p>The diagram shows a directed association between the <code>language</code> element and the <code>xs:string</code> element. A callout box indicates that <code>language</code> is "The language used for this catalogue." Another callout box indicates that <code>xs:string</code> is "Built-in primitive type. The string datatype represents character strings in XML."</p>
Type	xs:string
Properties	<p>content: simple</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Source	<pre>&lt;xs:element name="language" type="xs:string" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The language used for this catalogue.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_Catalogue / locale

Diagram	<p>The diagram shows a directed association between the <code>locale</code> element and the <code>gmd:PT_Locale_Type</code> element. This type is an extension base for <code>gco:AbstractObject_Type</code>. The <code>gco:AbstractObject_Type</code> has an attribute <code>gco:ObjectIdentification</code>. The <code>gmd:PT_Locale_Type</code> also contains three other attributes: <code>languageCode</code>, <code>country</code>, and <code>characterEncoding</code>.</p>
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Type	gmd:PT_Locale_Type		
Type hierarchy	<ul style="list-style-type: none"> <li>• gco:AbstractObject_Type</li> <li>• gmd:PT_Locale_Type</li> </ul>		
Properties	content: complex minOccurs: 0 maxOccurs: 1		
Children	gmd:characterEncoding, gmd:country, gmd:languageCode		
Attributes	<b>QName</b> <b>id</b> <b>uuid</b>	<b>Type</b> xs:ID xs:string	<b>Use</b> optional optional
Source	<pre>&lt;xss:element name="locale" type="gmd:PT_Locale_Type" minOccurs="0" maxOccurs="1"/&gt;</pre>		

## Element s100\_Catalogue / characterSet

Annotations	Character set used in the catalogue.		
Diagram	<pre> classDiagram     class characterSet     class MD_CharacterSetCode_PropertyType {         &lt;&lt;@ Attributes&gt;&gt;         &lt;&lt;@ gco:nilReason&gt;&gt;     }     characterSet "1" -- "0..1" MD_CharacterSetCode_PropertyType     MD_CharacterSetCode_PropertyType "*" -- "1..1" gco:nilReason   </pre>		
Type	gmd:MD_CharacterSetCode_PropertyType		
Properties	content: complex minOccurs: 0 maxOccurs: 1		
Children	gmd:MD_CharacterSetCode		
Attributes	<b>QName</b> <b>gco:nilReason</b>	<b>Type</b> gml:NilReasonType	<b>Use</b> optional
Source	<pre>&lt;xss:element name="characterSet" type="gmd:MD_CharacterSetCode_PropertyType" minOccurs="0" maxOccurs="1"&gt;   &lt;xss:annotation&gt;     &lt;xss:documentation&gt;Character set used in the catalogue.&lt;/xss:documentation&gt;   &lt;/xss:annotation&gt; &lt;/xss:element&gt;</pre>		

## Element s100\_IC\_InteroperabilityCatalogue / description

Diagram	<pre> classDiagram     class description     class xsstring {         &lt;&lt;Built-in primitive type. The string datatype represents character strings in XML. &gt;&gt;     }     description --&gt; xsstring   </pre>
Type	xs:string
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<pre>&lt;xss:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;</pre>

## Element s100\_IC\_InteroperabilityCatalogue / comment

Diagram	<pre> classDiagram     class comment     class xsstring {         &lt;&lt;Built-in primitive type. The string datatype represents character strings in XML. &gt;&gt;     }     comment --&gt; xsstring   </pre>
Type	xs:string

Properties	content: simple minOccurs: 0 maxOccurs: 1
Source	<xss:element name="comment" type="xs:string" minOccurs="0" maxOccurs="1"/>

## Element S100\_IC\_InteroperabilityCatalogue / digitalSignatureReference

Diagram	 A UML class diagram fragment. A rounded rectangle labeled "digitalSignatureReference" has a solid line with a hollow circle at its end pointing to another rounded rectangle labeled "xs:string". A callout box below "xs:string" contains the text "Built-in primitive type. The string datatype represents character strings in XML."/>
Type	xs:string
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="digitalSignatureReference" type="xs:string" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_InteroperabilityCatalogue / digitalSignatureValue

Diagram	 A UML class diagram fragment. A rounded rectangle labeled "digitalSignatureValue" has a solid line with a hollow circle at its end pointing to another rounded rectangle labeled "xs:string". A callout box below "xs:string" contains the text "Built-in primitive type. The string datatype represents character strings in XML."/>
Type	xs:string
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="digitalSignatureValue" type="xs:string" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_InteroperabilityCatalogue / requirementType

Annotations	The type of authority or requestor responsible for the specifications, rules, or requirements based on which this catalogue was prepared.															
Diagram	 A UML class diagram fragment. A rounded rectangle labeled "requirementType" has a solid line with a hollow circle at its end pointing to a composite rectangle labeled "Derivation" and "restriction". Inside the composite rectangle is a "Base Type" section with "xs:string". A callout box below "requirementType" contains the text "The type of authority or requestor responsible for the specifications, rules, or requirements based on which this...".															
Type	requirementType															
Properties	content: simple minOccurs: 1 maxOccurs: 1															
Facets	<table> <tr> <td>enumeration</td> <td>IHO</td> <td>Original IHO interoperability catalogue</td> </tr> <tr> <td>enumeration</td> <td>OEM</td> <td>Prepared according to requirements specified by OEM or systems integrator</td> </tr> <tr> <td>enumeration</td> <td>national</td> <td>Prepared according to requirements specified by a national government, group of national governments (e.g., the European Union), or governmental agency such as a national shipping authority or the USCG.</td> </tr> <tr> <td>enumeration</td> <td>local</td> <td>Prepared according to requirements specified by a sub-national governmental authority such as a state, province, or county.</td> </tr> <tr> <td>enumeration</td> <td>port</td> <td>Prepared according to requirements specified by a harbormaster's office or port authority</td> </tr> </table>	enumeration	IHO	Original IHO interoperability catalogue	enumeration	OEM	Prepared according to requirements specified by OEM or systems integrator	enumeration	national	Prepared according to requirements specified by a national government, group of national governments (e.g., the European Union), or governmental agency such as a national shipping authority or the USCG.	enumeration	local	Prepared according to requirements specified by a sub-national governmental authority such as a state, province, or county.	enumeration	port	Prepared according to requirements specified by a harbormaster's office or port authority
enumeration	IHO	Original IHO interoperability catalogue														
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enumeration	local	Prepared according to requirements specified by a sub-national governmental authority such as a state, province, or county.														
enumeration	port	Prepared according to requirements specified by a harbormaster's office or port authority														

	enumeration	company	Prepared according to requirements specified by the owner, charterer, or operator
	enumeration	master	Prepared according to requirements specified by the vessel's Master
	enumeration	pilot	Prepared according to requirements specified by a pilot
	enumeration	other	Other source
Source	<pre>&lt;xs:element name="requirementType" type="requirementType" minOccurs="1" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;The type of authority or requestor responsible for the specifications, rules, or requirements based on which this catalogue was prepared.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>		

## Element S100\_IC\_InteroperabilityCatalogue / requirementDescription

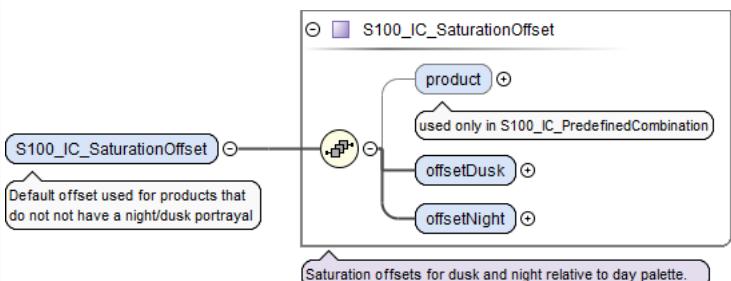
Annotations	Description of the source of the requirements or specifications upon which this catalogue is based. This might be the name of the country, company, OEM, port, pilot, etc.								
Diagram									
Type	xs:string								
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>1</td> </tr> </table>			content:	simple	minOccurs:	0	maxOccurs:	1
content:	simple								
minOccurs:	0								
maxOccurs:	1								
Source	<pre>&lt;xs:element name="requirementDescription" type="xs:string" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Description of the source of the requirements or specifications upon which this catalogue is based. This might be the name of the country, company, OEM, port, pilot, etc.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>								

## Element S100\_IC\_InteroperabilityCatalogue / productCovered

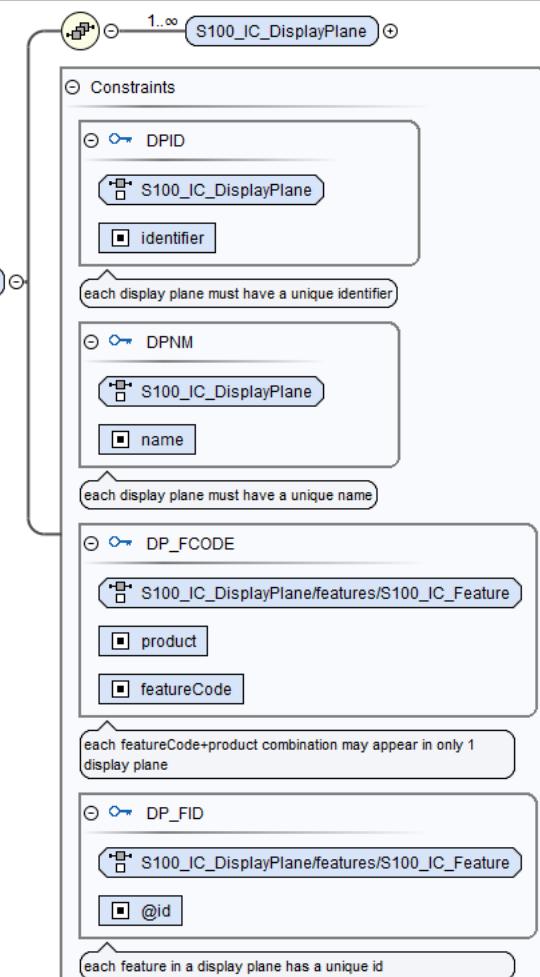
Diagram																														
Type	dataProduct																													
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>			content:	simple	minOccurs:	1	maxOccurs:	unbounded																					
content:	simple																													
minOccurs:	1																													
maxOccurs:	unbounded																													
Facets	<table border="1"> <tr> <td>enumeration</td> <td>S-101</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-102</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-111</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-112</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-122</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-124</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-411</td> <td></td> </tr> <tr> <td>enumeration</td> <td>S-412</td> <td></td> </tr> <tr> <td>enumeration</td> <td>HYBRID</td> <td>Hybridized features created during interoperability processing</td> </tr> </table>			enumeration	S-101		enumeration	S-102		enumeration	S-111		enumeration	S-112		enumeration	S-122		enumeration	S-124		enumeration	S-411		enumeration	S-412		enumeration	HYBRID	Hybridized features created during interoperability processing
enumeration	S-101																													
enumeration	S-102																													
enumeration	S-111																													
enumeration	S-112																													
enumeration	S-122																													
enumeration	S-124																													
enumeration	S-411																													
enumeration	S-412																													
enumeration	HYBRID	Hybridized features created during interoperability processing																												
Source	<pre>&lt;xs:element name="productCovered" type="dataProduct" minOccurs="1" maxOccurs="unbounded" /&gt;</pre>																													

## Element S100\_IC\_InteroperabilityCatalogue / S100\_IC\_SaturationOffset

Annotations	Default offset used for products that do not have a night/dusk portrayal
-------------	--

Diagram	
Type	S100_IC_SaturationOffset
Properties	content: complex
Children	offsetDusk, offsetNight, product
Source	<pre>&lt;xs:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Default offset used for products that do not have a night/dusk portrayal&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element s100\_IC\_InteroperabilityCatalogue / displayPlanes

Diagram	
Properties	content: complex
Children	S100_IC_DisplayPlane
Source	<pre>&lt;xs:element name="displayPlanes"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element name="S100_IC_DisplayPlane" type="S100_IC_DisplayPlane" minOccurs="1"         maxOccurs="unbounded" /&gt;</pre>

```

</xs:sequence>
</xs:complexType>
<xs:key name="DPID">
  <xs:annotation>
    <xs:documentation>each display plane must have a unique identifier</xs:documentation>
  </xs:annotation>
  <xs:selector xpath="S100_IC_DisplayPlane" />
  <xs:field xpath="identifier" />
</xs:key>
<xs:key name="DPNM">
  <xs:annotation>
    <xs:documentation>each display plane must have a unique name</xs:documentation>
  </xs:annotation>
  <xs:selector xpath="S100_IC_DisplayPlane" />
  <xs:field xpath="name" />
</xs:key>
<xs:key name="DP_FCODE">
  <xs:annotation>
    <xs:documentation>each featureCode+product combination may appear in only 1 display plane</xs:documentation>
  </xs:annotation>
  <xs:selector xpath="S100_IC_DisplayPlane/features/S100_IC_Feature" />
  <xs:field xpath="product" />
  <xs:field xpath="featureCode" />
</xs:key>
<xs:key name="DP_FID">
  <xs:annotation>
    <xs:documentation>each feature in a display plane has a unique id</xs:documentation>
  </xs:annotation>
  <xs:selector xpath="S100_IC_DisplayPlane/features/S100_IC_Feature" />
  <xs:field xpath="@id" />
</xs:key>
</xs:element>

```

## Element S100\_IC\_InteroperabilityCatalogue / displayPlanes / S100\_IC\_DisplayPlane

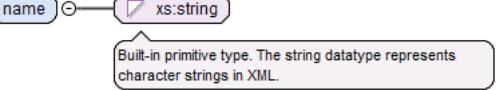
Diagram							
Type	S100_IC_DisplayPlane						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>1</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	complex	minOccurs:	1	maxOccurs:	unbounded
content:	complex						
minOccurs:	1						
maxOccurs:	unbounded						
Children	S100_IC_SaturationOffset, description, displayPriority, features, identifier, name						
Source	<code>&lt;xs:element name="S100_IC_DisplayPlane" type="S100_IC_DisplayPlane" minOccurs="1" maxOccurs="unbounded" /&gt;</code>						

## Element S100\_IC\_DisplayPlane / identifier

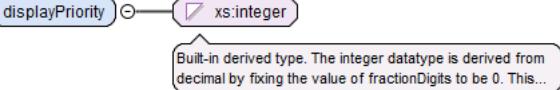
Diagram	
Type	xs:integer

Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="identifier" type="xs:integer" minOccurs="1" maxOccurs="1"/>

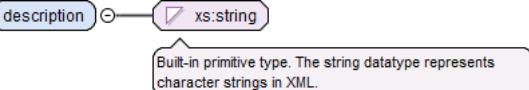
## Element S100\_IC\_DisplayPlane / name

Diagram	
Type	xs:string
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"/>

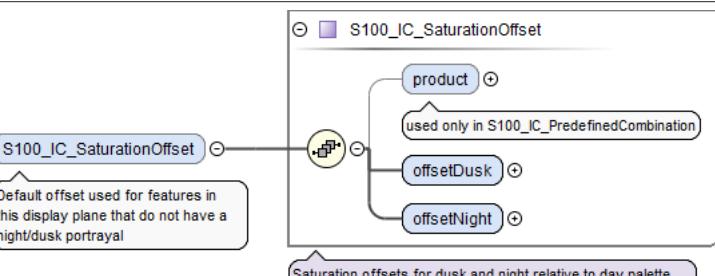
## Element S100\_IC\_DisplayPlane / displayPriority

Diagram	
Type	xs:integer
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="displayPriority" type="xs:integer" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_DisplayPlane / description

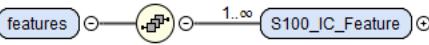
Diagram	
Type	xs:string
Properties	content: simple minOccurs: 1 maxOccurs: 1
Source	<xss:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"/>

## Element S100\_IC\_DisplayPlane / S100\_IC\_SaturationOffset

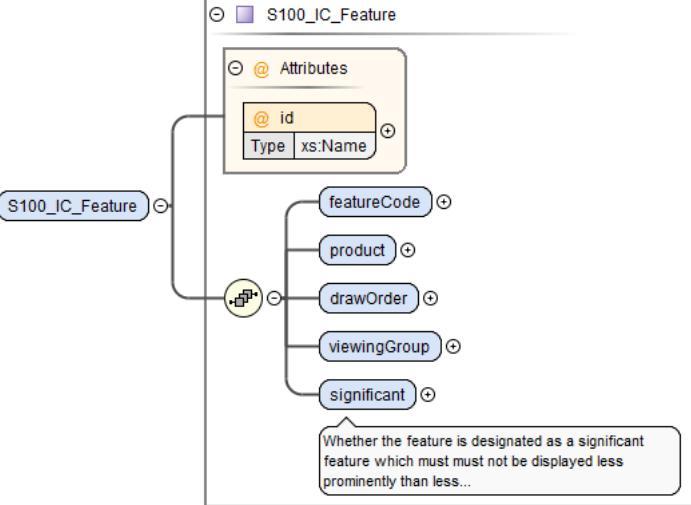
Annotations	Default offset used for features in this display plane that do not have a night/dusk portrayal
Diagram	

Type	S100_IC_SaturationOffset
Properties	<p>content: complex</p> <p>minOccurs: 0</p> <p>maxOccurs: 1</p>
Children	offsetDusk, offsetNight, product
Source	<pre>&lt;xs:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset" minOccurs="0" maxOccurs="1"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Default offset used for features in this display plane that do not have a night/dusk portrayal&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:element&gt;</pre>

## Element S100\_IC\_DisplayPlane / features

Diagram	
Properties	content: complex
Children	S100_IC_Feature
Source	<pre>&lt;xs:element name="features"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element name="S100_IC_Feature" type="S100_IC_Feature" minOccurs="1" maxOccurs="unbounded" /&gt;     &lt;/xs:sequence&gt;   &lt;/xs:complexType&gt; &lt;/xs:element&gt;</pre>

## Element S100\_IC\_DisplayPlane / features / S100\_IC\_Feature

Diagram							
Type	S100_IC_Feature						
Properties	<p>content: complex</p> <p>minOccurs: 1</p> <p>maxOccurs: unbounded</p>						
Children	drawOrder, featureCode, product, significant, viewingGroup						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	<b>id</b>	xs:Name	required
QName	Type	Use					
<b>id</b>	xs:Name	required					
Source	<pre>&lt;xs:element name="S100_IC_Feature" type="S100_IC_Feature" minOccurs="1" maxOccurs="unbounded" /&gt;</pre>						

## Element S100\_IC\_InteroperabilityCatalogue / predefinedProductCombinations

Diagram	<pre> classDiagram     class S100_IC_InteroperabilityCatalogue {         &lt;&lt;predefinedProductCombinations&gt;&gt;         &lt;&lt;S100_IC_PredefinedCombination&gt;&gt; *--&gt; S100_IC_InteroperabilityCatalogue     }     class Constraints {         &lt;&lt;PDCID&gt;&gt;         &lt;&lt;S100_IC_PredefinedCombination&gt;&gt;         &lt;&lt;identifier&gt;&gt;         &lt;&lt;Each PDC must have a unique identifier&gt;&gt;         &lt;&lt;PDCNM&gt;&gt;         &lt;&lt;S100_IC_PredefinedCombination&gt;&gt;         &lt;&lt;name&gt;&gt;         &lt;&lt;Each PDC must have a unique name&gt;&gt;     }     S100_IC_InteroperabilityCatalogue "0..&gt;" --&gt;* S100_IC_PredefinedCombination     S100_IC_PredefinedCombination "*" --&gt; Constraints     Constraints "*" --&gt; S100_IC_PredefinedCombination   </pre>
Properties	content: complex
Children	S100_IC_PredefinedCombination
Source	<pre> &lt;xs:element name="predefinedProductCombinations"&gt;   &lt;xs:complexType&gt;     &lt;xs:sequence&gt;       &lt;xs:element name="S100_IC_PredefinedCombination" type="S100_IC_PredefinedCombination" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;/xs:sequence&gt;   &lt;/xs:complexType&gt;   &lt;xs:key name="PDCID"&gt;     &lt;xs:annotation&gt;       &lt;xs:documentation&gt;Each PDC must have a unique identifier&lt;/xs:documentation&gt;     &lt;/xs:annotation&gt;     &lt;xs:selector xpath="S100_IC_PredefinedCombination" /&gt;     &lt;xs:field xpath="identifier" /&gt;   &lt;/xs:key&gt;   &lt;xs:key name="PDCNM"&gt;     &lt;xs:annotation&gt;       &lt;xs:documentation&gt;Each PDC must have a unique name&lt;/xs:documentation&gt;     &lt;/xs:annotation&gt;     &lt;xs:selector xpath="S100_IC_PredefinedCombination" /&gt;     &lt;xs:field xpath="name" /&gt;   &lt;/xs:key&gt; &lt;/xs:element&gt;   </pre>

## Element s100\_IC\_InteroperabilityCatalogue / predefinedProductCombinations / S100\_IC\_PredefinedCombination

Diagram	<p>The diagram shows the structure of the S100_IC_PredefinedCombination element. It has the following attributes:</p> <ul style="list-style-type: none"> <li><b>identifier</b>: Identifier of the predefined combination.</li> <li><b>name</b>: Name of combination.</li> <li><b>description</b>: Brief description of combination.</li> <li><b>useConditions</b>: Conditions for which the combination is designed.</li> <li><b>interoperabilityLevel</b>: The highest level of interoperability functionality encoded within an instance of this type.</li> <li><b>includedProduct</b>: Products recommended to be active in this mode (multiplicity 2..∞).</li> <li><b>suppressedFeatureLayers</b>.</li> <li><b>derivedFeatures</b>.</li> <li><b>colorModeOffsets</b>.</li> </ul> <p>A note at the bottom states: "Pre-defined combinations are identifiable pre-set collections of recommended and optional S-NNN data products which are..."</p>						
Type	S100_IC_PredefinedCombination						
Properties	<table border="1"> <tr> <td>content:</td><td>complex</td></tr> <tr> <td>minOccurs:</td><td>0</td></tr> <tr> <td>maxOccurs:</td><td>unbounded</td></tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	colorModeOffsets, derivedFeatures, description, identifier, includedProduct, interoperabilityLevel, name, suppressedFeatureLayers, useConditions						
Source	<pre>&lt;xss:element name="S100_IC_PredefinedCombination" type="S100_IC_PredefinedCombination" minOccurs="0" maxOccurs="unbounded" /&gt;</pre>						

## Element s100\_IC\_InteroperabilityCatalogue / hybridizationRules

Diagram	<p>The diagram shows the structure of the hybridizationRules element. It has the following associations:</p> <ul style="list-style-type: none"> <li><b>hybridizationRules</b> (multiplicity 0..∞) is associated with S100_IC_SimpleRule (multiplicity 0..∞), S100_IC_ThematicRule (multiplicity 0..∞), and S100_IC_CompleteRule (multiplicity 0..∞).</li> </ul> <p>It also contains a constraint named RULE_IDENTIFIER:</p> <ul style="list-style-type: none"> <li><b>ruleIdentifier</b>: A unique identifier for each rule.</li> <li>A note states: "Each rule must have a unique ruleIdentifier".</li> </ul>
Properties	content: complex
Children	S100_IC_CompleteRule, S100_IC_SimpleRule, S100_IC_ThematicRule
Source	<pre>&lt;xss:element name="hybridizationRules"&gt;   &lt;xss:complexType&gt;</pre>

```

<xs:sequence>
  <xs:element name="S100_IC_SimpleRule" type="S100_IC_SimpleRule" minOccurs="0"
  maxOccurs="unbounded"/>
  <xs:element name="S100_IC_ThematicRule" type="S100_IC_ThematicRule" minOccurs="0"
  maxOccurs="unbounded"/>
  <xs:element name="S100_IC_CompleteRule" type="S100_IC_CompleteRule" minOccurs="0"
  maxOccurs="unbounded"/>
</xs:sequence>
</xs:complexType>
<xs:key name="RULE_IDENTIFIER">
  <xs:annotation>
    <xs:documentation>Each rule must have a unique ruleIdentifier</xs:documentation>
  </xs:annotation>
  <xs:selector xpath="*"/>
  <xs:field xpath="ruleIdentifier"/>
</xs:key>
</xs:elements>

```

## Element S100\_IC\_InteroperabilityCatalogue / hybridizationRules / S100\_IC\_SimpleRule

Diagram	<p>S100_IC_SimpleRule Base Type: S100_IC_HybridFeatureCreationRule Content: complex</p> <p>S100_IC_HybridFeatureCreationRule (extension base) Abstract: true</p> <p>Attributes: @ id (Type: xs:Name) ruleIdentifier (Type: Rule identifier)</p> <p>Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...</p>						
Type	S100_IC_SimpleRule						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule</li> <li>• S100_IC_SimpleRule</li> </ul>						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre>&lt;xs:element name="S100_IC_SimpleRule" type="S100_IC_SimpleRule" minOccurs="0" maxOccurs="unbounded" /&gt;</pre>						

## Element S100\_IC\_HybridFeatureCreationRule / ruleIdentifier

Annotations	Rule identifier				
Diagram	<p>ruleIdentifier → xs:string</p> <p>Rule identifier Built-in primitive type. The string datatype represents character strings in XML.</p>				
Type	xs:string				
Properties	<table border="1"> <tr> <td>content:</td> <td>simple</td> </tr> <tr> <td>minOccurs:</td> <td>1</td> </tr> </table>	content:	simple	minOccurs:	1
content:	simple				
minOccurs:	1				

	maxOccurs:	1
Source	<xs:element name="ruleIdentifier" type="xs:string" minOccurs="1" maxOccurs="1"> <xs:annotation> <xs:documentation>Rule identifier</xs:documentation> </xs:annotation> </xs:element>	

## Element S100\_IC\_InteroperabilityCatalogue / hybridizationRules / S100\_IC\_ThematicRule

Diagram							
Type	S100_IC_ThematicRule						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule           <ul style="list-style-type: none"> <li>• S100_IC_ThematicRule</li> </ul> </li> </ul>						
Properties	<table border="1"> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<xs:element name="S100_IC_ThematicRule" type="S100_IC_ThematicRule" minOccurs="0" maxOccurs="unbounded"/>						

## Element S100\_IC\_InteroperabilityCatalogue / hybridizationRules / S100\_IC\_CompleteRule

Diagram	<pre> classDiagram     class S100_IC_CompleteRule {         &lt;&lt;S100_IC_HybridFeatureCreationRule (extension base)&gt;&gt;         &lt;&lt;Abstract true&gt;&gt;         &lt;&lt;Attributes&gt;&gt;         &lt;&lt;@id : xs:Name&gt;&gt;         &lt;&lt;ruleIdentifier : Rule identifier&gt;&gt;     } </pre> <p>Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...</p>						
Type	S100_IC_CompleteRule						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule             <ul style="list-style-type: none"> <li>• S100_IC_CompleteRule</li> </ul> </li> </ul>						
Properties	<table> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre> &lt;xss:element name="S100_IC_CompleteRule" type="S100_IC_CompleteRule" minOccurs="0"   maxOccurs="unbounded"/&gt; </pre>						

## Element S100\_IC\_InteroperabilityCatalogue / hybridPC

Diagram	<pre> sequenceDiagram     hybridPC --&gt; S100_IC_HybridPC     hybridPC *-- 0..∞ --&gt; S100_IC_HybridPC </pre>						
Properties	<table> <tr> <td>content:</td> <td>complex</td> </tr> <tr> <td>minOccurs:</td> <td>0</td> </tr> <tr> <td>maxOccurs:</td> <td>unbounded</td> </tr> </table>	content:	complex	minOccurs:	0	maxOccurs:	unbounded
content:	complex						
minOccurs:	0						
maxOccurs:	unbounded						
Children	S100_IC_HybridPC						
Source	<pre> &lt;xss:element name="hybridPC" minOccurs="0" maxOccurs="unbounded"&gt;   &lt;xss:complexType&gt;     &lt;xss:annotation&gt;       &lt;xss:documentation&gt;Reference to the hybrid portrayals catalogue&lt;/xss:documentation&gt;     &lt;/xss:annotation&gt;     &lt;xss:sequence&gt;       &lt;xss:element name="S100_IC_HybridPC" type="xs:anyURI" minOccurs="0" maxOccurs="unbounded"/&gt;     &lt;/xss:sequence&gt;   &lt;/xss:complexType&gt; &lt;/xss:element&gt; </pre>						

## Element S100\_IC\_InteroperabilityCatalogue / hybridPC / S100\_IC\_HybridPC

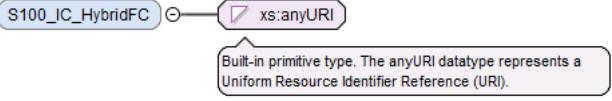
Diagram	<pre> classDiagram     S100_IC_HybridPC --&gt; xs:anyURI </pre> <p>Built-in primitive type. The anyURI datatype represents a Uniform Resource Identifier Reference (URI).</p>
---------	---

Type	xs:anyURI
Properties	content: simple
	minOccurs: 0
	maxOccurs: unbounded
Source	<xs:element name="S100_IC_HybridPC" type="xs:anyURI" minOccurs="0" maxOccurs="unbounded"/>

## Element S100\_IC\_InteroperabilityCatalogue / hybridFC

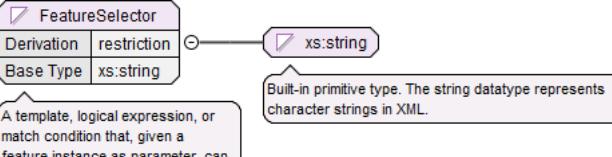
Diagram	
Properties	content: complex
	minOccurs: 0
	maxOccurs: unbounded
Children	S100_IC_HybridFC
Source	<xs:element name="hybridFC" minOccurs="0" maxOccurs="unbounded"> <xs:complexType> <xs:annotation> <xs:documentation>Reference to the hybrid features catalogue</xs:documentation> </xs:annotation> <xs:sequence> <xs:element name="S100_IC_HybridFC" type="xs:anyURI" minOccurs="0" maxOccurs="unbounded"/> </xs:sequence> </xs:complexType> </xs:element>

## Element S100\_IC\_InteroperabilityCatalogue / hybridFC / S100\_IC\_HybridFC

Diagram	
Properties	Type: xs:anyURI
	content: simple
	minOccurs: 0
	maxOccurs: unbounded
Source	<xs:element name="S100_IC_HybridFC" type="xs:anyURI" minOccurs="0" maxOccurs="unbounded"/>

## Simple Type(s)

### Simple Type FeatureSelector

Annotations	A template, logical expression, or match condition that, given a feature instance as parameter, can be evaluated to produce a TRUE/FALSE result. Format TBD. Allowed forms depend on the interoperability level, e.g., only level 4 expressions can use complex spatial queries. Examples: "CATICE=5"; SQL select expression; XSLT match condition.
Diagram	
	A template, logical expression, or match condition that, given a feature instance as parameter, can be evaluated to...
Type	xs:string
Source	<xs:simpleType name="FeatureSelector"> <xs:annotation> <xs:documentation>A template, logical expression, or match condition that, given a feature instance as parameter, can be evaluated to produce a TRUE/FALSE result. Format TBD. Allowed forms depend on the interoperability level, e.g., only level 4 expressions can use complex spatial queries. Examples: "CATICE=5"; SQL select expression; XSLT match condition.</xs:documentation> </xs:annotation> <xs:restriction base="xs:string"/> </xs:simpleType>

## Simple Type `referenceType`

Annotations	References to items defined elsewhere in the XML file. To be completed.
Diagram	<pre> classDiagram     class referenceType {         derivation         restriction     }     class xsString {         &lt;&lt;Built-in primitive type. The string datatype represents character strings in XML.&gt;&gt;     }     referenceType "3" --&gt; xsString : restriction   </pre>
Type	<code>xs:string</code>
Source	<pre> &lt;xs:simpleType name="referenceType"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;References to items defined elsewhere in the XML file. To be completed.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:restriction base="xs:string" /&gt; &lt;/xs:simpleType&gt;   </pre>

## Simple Type `dataProduct`

Diagram	<pre> classDiagram     class dataProduct {         derivation         restriction     }     class xsString {         &lt;&lt;Built-in primitive type. The string datatype represents character strings in XML.&gt;&gt;     }     dataProduct "3" --&gt; xsString : restriction   </pre>																			
Type	restriction of <code>xs:string</code>																			
Facets	<table border="1"> <tr> <td>enumeration</td> <td>S-101</td> </tr> <tr> <td>enumeration</td> <td>S-102</td> </tr> <tr> <td>enumeration</td> <td>S-111</td> </tr> <tr> <td>enumeration</td> <td>S-112</td> </tr> <tr> <td>enumeration</td> <td>S-122</td> </tr> <tr> <td>enumeration</td> <td>S-124</td> </tr> <tr> <td>enumeration</td> <td>S-411</td> </tr> <tr> <td>enumeration</td> <td>S-412</td> </tr> <tr> <td>enumeration</td> <td>HYBRID</td> <td>Hybridized features created during interoperability processing</td> </tr> </table>	enumeration	S-101	enumeration	S-102	enumeration	S-111	enumeration	S-112	enumeration	S-122	enumeration	S-124	enumeration	S-411	enumeration	S-412	enumeration	HYBRID	Hybridized features created during interoperability processing
enumeration	S-101																			
enumeration	S-102																			
enumeration	S-111																			
enumeration	S-112																			
enumeration	S-122																			
enumeration	S-124																			
enumeration	S-411																			
enumeration	S-412																			
enumeration	HYBRID	Hybridized features created during interoperability processing																		
Source	<pre> &lt;xs:simpleType name="dataProduct"&gt;   &lt;xs:restriction base="xs:string"&gt;     &lt;xs:enumeration value="S-101"/&gt;     &lt;xs:enumeration value="S-102"/&gt;     &lt;xs:enumeration value="S-111"/&gt;     &lt;xs:enumeration value="S-112"/&gt;     &lt;xs:enumeration value="S-122"/&gt;     &lt;xs:enumeration value="S-124"/&gt;     &lt;xs:enumeration value="S-411"/&gt;     &lt;xs:enumeration value="S-412"/&gt;     &lt;xs:enumeration value="HYBRID"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Hybridized features created during interoperability processing&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;   </pre>																			

## Simple Type `requirementType`

Diagram	<pre> classDiagram     class requirementType {         derivation         restriction     }     class xsString {         &lt;&lt;Built-in primitive type. The string datatype represents character strings in XML.&gt;&gt;     }     requirementType "3" --&gt; xsString : restriction   </pre>			
Type	restriction of <code>xs:string</code>			
Facets	<table border="1"> <tr> <td>enumeration</td> <td>IHO</td> <td>Original IHO interoperability catalogue</td> </tr> </table>	enumeration	IHO	Original IHO interoperability catalogue
enumeration	IHO	Original IHO interoperability catalogue		

	enumeration	OEM	Prepared according to requirements specified by OEM or systems integrator
	enumeration	national	Prepared according to requirements specified by a national government, group of national governments (e.g., the European Union), or governmental agency such as a national shipping authority or the USCG.
	enumeration	local	Prepared according to requirements specified by a sub-national governmental authority such as a state, province, or county.
	enumeration	port	Prepared according to requirements specified by a harbormaster's office or port authority
	enumeration	company	Prepared according to requirements specified by the owner, charterer, or operator
	enumeration	master	Prepared according to requirements specified by the vessel's Master
	enumeration	pilot	Prepared according to requirements specified by a pilot
	enumeration	other	Other source
Source	<pre> &lt;xs:simpleType name="requirementType"&gt;   &lt;xs:restriction base="xs:string"&gt;     &lt;xs:enumeration value="IHO"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Original IHO interoperability catalogue&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="OEM"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by OEM or systems integrator&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="national"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by a national government, group of national governments (e.g., the European Union), or governmental agency such as a national shipping authority or the USCG.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="local"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by a sub-national governmental authority such as a state, province, or county.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="port"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by a harbormaster's office or port authority&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="company"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by the owner, charterer, or operator&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="master"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by the vessel's Master&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="pilot"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Prepared according to requirements specified by a pilot&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;     &lt;xs:enumeration value="other"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Other source&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:enumeration&gt;   &lt;/xs:restriction&gt; &lt;/xs:simpleType&gt;</pre>		

## Complex Type(s)

### Complex Type S100\_CataloguePointofContact

Annotations	Contact details of the issuer of this exchange catalogue
Diagram	<pre> classDiagram     S100_CataloguePointofContact &lt; -- organization     S100_CataloguePointofContact &lt; -- phone     S100_CataloguePointofContact &lt; -- address     </pre> <p>The diagram illustrates the structure of the S100_CataloguePointofContact complex type. It starts with a box labeled "S100_CataloguePointofContact" with a multiplicity of 1..* at its end. This points to three separate boxes: "organization" (with multiplicity 1..1), "phone" (with multiplicity 1..1), and "address" (with multiplicity 0..1). Each of these three boxes has a descriptive text box below it: "The organization distributing this exchange catalogue' This could be an individual producer, value added reseller, etc." for organization, "The phone number of the organization." for phone, and "The address of the organization." for address.</p>
Children	address, organization, phone
Source	<pre> &lt;xs:complexType name="S100_CataloguePointofContact"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Contact details of the issuer of this exchange catalogue&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="organization" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The organization distributing this exchange catalogue' This could be an individual producer, value added reseller, etc.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="phone" type="xs:string" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The phone number of the organization.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="address" type="xs:string" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The address of the organization.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;   &lt;/xs:sequence&gt; &lt;/xs:complexType&gt;   </pre>

### Complex Type S100\_IC\_Feature

Diagram	<pre> classDiagram     S100_IC_Feature &lt; -- featureCode     S100_IC_Feature &lt; -- product     S100_IC_Feature &lt; -- drawOrder     S100_IC_Feature &lt; -- viewingGroup     S100_IC_Feature &lt; -- significant     </pre> <p>The diagram illustrates the structure of the S100_IC_Feature complex type. It starts with a box labeled "S100_IC_Feature" with a multiplicity of 1..* at its end. This points to five separate boxes: "featureCode" (with multiplicity 1..1), "product" (with multiplicity 1..1), "drawOrder" (with multiplicity 1..1), "viewingGroup" (with multiplicity 1..1), and "significant" (with multiplicity 1..1). A box above these five labeled "Attributes" contains a sub-box for "@ id" with the type "xs:Name". A note below the "significant" box states: "Whether the feature is designated as a significant feature which must not be displayed less prominently than less...".</p>						
Children	drawOrder, featureCode, product, significant, viewingGroup						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre> &lt;xs:complexType name="S100_IC_Feature"&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="featureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="product" type="dataProduct" minOccurs="1" maxOccurs="1"/&gt;   &lt;/xs:sequence&gt; &lt;/xs:complexType&gt;   </pre>						

```

<xs:element name="drawOrder" type="xs:integer" minOccurs="1" maxOccurs="1"/>
<xs:element name="viewingGroup" type="xs:integer" minOccurs="1" maxOccurs="1"/>
<xs:element name="significant" type="xs:boolean" default="false" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Whether the feature is designated as a significant feature which must
    must not be displayed less prominently than less significant features in other overlying datasets.
    Remark: true=feature is designated as a significant feature</xs:documentation>
  </xs:annotation>
</xs:element>
</xs:sequence>
<xs:attribute name="id" type="xs:Name" use="required"/>
</xs:complexType>

```

## Complex Type S100\_IC\_PredefinedCombination

Annotations	<p>Pre-defined combinations are identifiable pre-set collections of recommended and optional S-NNN data products which are expected to be loaded by the user under specific conditions or for specified tasks. Each pre-defined combination is basically a package of data products, display priorities, context parameters, user settings, portrayal catalogues, etc. An ECDIS or other system can allow the user to initiate the loading of multiple data products and activate multiple parameter settings as a single action, by selecting one of a list of pre-defined combinations, instead of loading and unloading individual data products.</p>
Diagram	<pre> classDiagram     class S100_IC_PredefinedCombination {         identifier : string         name : string         description : string         useConditions : string         interoperabilityLevel : string         includedProduct : string * "2..infinity"         suppressedFeatureLayers : string         derivedFeatures : string         colorModeOffsets : string     }     note over S100_IC_PredefinedCombination: Pre-defined combinations are identifiable pre-set collections of recommended and optional S-NNN data products which are... </pre>
Children	colorModeOffsets, derivedFeatures, description, identifier, includedProduct, interoperabilityLevel, name, suppressedFeatureLayers, useConditions
Source	<pre> &lt;xs:complexType name="S100_IC_PredefinedCombination"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Pre-defined combinations are identifiable pre-set collections of recommended and optional S-NNN data products which are expected to be loaded by the user under specific conditions or for specified tasks. Each pre-defined combination is basically a package of data products, display priorities, context parameters, user settings, portrayal catalogues, etc. An ECDIS or other system can allow the user to initiate the loading of multiple data products and activate multiple parameter settings as a single action, by selecting one of a list of pre-defined combinations, instead of loading and unloading individual data products.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="identifier" type="xs:string"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Identifier of the predefined combination&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Name of combination&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Brief description of combination&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;   &lt;/xs:sequence&gt; </pre>

```

</xs:element>
<xs:element name="useConditions" type="xs:string" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>Conditions for which the combination is designed</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="interoperabilityLevel" type="xs:integer" minOccurs="1" maxOccurs="1">
  <xs:annotation>
    <xs:documentation>The highest level of interoperability functionality encoded within an instance of this type</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="includedProduct" type="dataProduct" minOccurs="2" maxOccurs="unbounded">
  <xs:annotation>
    <xs:documentation>Products recommended to be active in this mode</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="suppressedFeatureLayers" minOccurs="0" maxOccurs="1">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="S100_IC_SuppressedFeatureLayer" type="S100_IC_SuppressedFeatureLayer" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="derivedFeatures" minOccurs="0" maxOccurs="1">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="S100_IC_SuppressedFeatureInstance" type="S100_IC_SuppressedFeatureInstance" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="S100_IC_HybridFeature" type="S100_IC_HybridFeature" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="colorModeOffsets" minOccurs="0" maxOccurs="1">
  <xs:complexType>
    <xs:sequence>
      <xs:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<!--<xs:attribute name="identifier" type="xs:Name" use="required"/>-->
</xs:complexType>

```

## Complex Type S100\_IC\_SuppressedFeatureLayer

Annotations	Feature types to be suppressed (not rendered) by the portrayal engine						
Diagram							
Children	featureCode, featureRef, product						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th></tr> </thead> <tbody> <tr> <td><b>id</b></td><td>xs:Name</td><td>required</td></tr> </tbody> </table>	QName	Type	Use	<b>id</b>	xs:Name	required
QName	Type	Use					
<b>id</b>	xs:Name	required					
Source	<pre> &lt;xs:complexType name="S100_IC_SuppressedFeatureLayer"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Feature types to be suppressed (not rendered) by the portrayal engine&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="featureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="product" type="dataProduct" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="featureRef" type="referenceType" minOccurs="1" maxOccurs="unbounded"/&gt;   &lt;/xs:sequence&gt;   &lt;xs:attribute name="id" type="xs:Name" use="required"/&gt; &lt;/xs:complexType&gt; </pre>						

## Complex Type S100\_IC\_SuppressedFeatureInstance

Diagram	<p>S100_IC_FeatureDerivation (extension base) Abstract   true</p> <p><b>@ Attributes</b></p> <ul style="list-style-type: none"> <li>@ id (Type xs:Name)</li> </ul> <p>primaryProduct primaryFeatureCode primarySelector secondaryProduct secondaryFeatureCode secondarySelector outputProduct The output product. Normally indicates the hypothetical "hybrid" product. outputFeatureCode featureRef</p> <p>Derived features are created by consolidating features from 2 or more different products into one final view, so the...</p>						
Type	extension of S100_IC_FeatureDerivation						
Type hierarchy	<ul style="list-style-type: none"> <li>S100_IC_FeatureDerivation</li> <li>S100_IC_SuppressedFeatureInstance</li> </ul>						
Children	featureRef, outputFeatureCode, outputProduct, primaryFeatureCode, primaryProduct, primarySelector, secondaryFeatureCode, secondaryProduct, secondarySelector						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	<b>id</b>	xs:Name	required
QName	Type	Use					
<b>id</b>	xs:Name	required					
Source	<pre>&lt;xs:complexType name="S100_IC_SuppressedFeatureInstance"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="S100_IC_FeatureDerivation"&gt;       &lt;xs:sequence/&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;</pre>						

## Complex Type S100\_IC\_FeatureDerivation

Annotations	<p>Derived features are created by consolidating features from 2 or more different products into one final view, so the changes can include geometry, attribution and/or portrayal (depending on the interoperability level).</p> <p>Individual primary and secondary inputs are suppressed from being rendered and only the resulting derived feature is added to the data stack.</p> <p>The resulting derived feature does not need to have any hybrid characteristics i.e. one restricted area replaced with another restricted area will use regular PC/FC of the primary product. However if the result feature needs to be supported by any custom FC or PC elements they must be defined under hybrid FC and hybrid PC accordingly. A rule for creating the feature must be described in the rules section.</p>
-------------	--

Diagram	<pre> classDiagram     class S100_IC_FeatureDerivation {         @id : xs:Name     }     S100_IC_FeatureDerivation &lt; -- primaryProduct     S100_IC_FeatureDerivation &lt; -- primaryFeatureCode     S100_IC_FeatureDerivation &lt; -- primarySelector     S100_IC_FeatureDerivation &lt; -- secondaryProduct     S100_IC_FeatureDerivation &lt; -- secondaryFeatureCode     S100_IC_FeatureDerivation &lt; -- secondarySelector     S100_IC_FeatureDerivation &lt; -- outputProduct     S100_IC_FeatureDerivation &lt; -- outputFeatureCode     S100_IC_FeatureDerivation &lt; -- featureRef </pre> <p><b>Derived features are created by consolidating features from 2 or more different products into one final view, so the...</b></p>								
Properties	abstract: true								
Children	featureRef, outputFeatureCode, outputProduct, primaryFeatureCode, primaryProduct, primarySelector, secondaryFeatureCode, secondaryProduct, secondarySelector								
Attributes	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">QName</th> <th style="text-align: left; padding: 2px;">Type</th> <th style="text-align: left; padding: 2px;">Use</th> <th style="text-align: left; padding: 2px;"></th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><b>id</b></td><td style="padding: 2px;">xs:Name</td><td style="padding: 2px;">required</td><td style="padding: 2px;"></td></tr> </tbody> </table>	QName	Type	Use		<b>id</b>	xs:Name	required	
QName	Type	Use							
<b>id</b>	xs:Name	required							
Source	<pre> &lt;xs:complexType name="S100_IC_FeatureDerivation" abstract="true"&gt;     &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Derived features are created by consolidating features from 2 or more different products into one final view, so the changes can include geometry, attribution and/or portrayal (depending on the interoperability level). Individual primary and secondary inputs are suppressed from being rendered and only the resulting derived feature is added to the data stack. The resulting derived feature does not need to have any hybrid characteristics i.e. one restricted area replaced with another restricted area will use regular PC/FC of the primary product. However if the result feature needs to be supported by any custom FC or PC elements they must be defined under hybrid FC and hybrid PC accordingly. A rule for creating the feature must be described in the rules section.&lt;/xs:documentation&gt;     &lt;/xs:annotation&gt;     &lt;xs:sequence&gt;         &lt;xs:element name="primaryProduct" type="dataProduct" minOccurs="1" maxOccurs="1"/&gt;         &lt;xs:element name="primaryFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;         &lt;xs:element name="primarySelector" type="FeatureSelector" minOccurs="0" maxOccurs="1"/&gt;         &lt;xs:element name="secondaryProduct" type="dataProduct" minOccurs="1" maxOccurs="1"/&gt;         &lt;xs:element name="secondaryFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;         &lt;xs:element name="secondarySelector" type="FeatureSelector" minOccurs="0" maxOccurs="1"/&gt;         &lt;xs:element name="outputProduct" type="dataProduct" minOccurs="1" maxOccurs="1"&gt;             &lt;xs:annotation&gt;                 &lt;xs:documentation&gt;The output product. Normally indicates the hypothetical "hybrid" product.&lt;/xs:documentation&gt;             &lt;/xs:annotation&gt;         &lt;/xs:element&gt;         &lt;xs:element name="outputFeatureCode" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;         &lt;xs:element name="featureRef" type="referenceType" minOccurs="1" maxOccurs="1"/&gt;     &lt;/xs:sequence&gt;     &lt;xs:attribute name="id" type="xs:Name" use="required"/&gt; &lt;/xs:complexType&gt; </pre>								

## Complex Type S100\_IC\_HybridFeature

Diagram	<pre> classDiagram     class S100_IC_FeatureDerivation {         @id : xs:Name         primaryProduct         primaryFeatureCode         primarySelector         secondaryProduct         secondaryFeatureCode         secondarySelector         outputProduct         outputFeatureCode         featureRef     }     class S100_IC_HybridFeature {         &lt; -- S100_IC_FeatureDerivation         creationRule     }     S100_IC_FeatureDerivation &lt; -- S100_IC_HybridFeature     note over S100_IC_HybridFeature: Derived features are created by consolidating features from 2 or more different products into one final view, so the...   </pre>						
Type	extension of S100_IC_FeatureDerivation						
Type hierarchy	<ul style="list-style-type: none"> <li>S100_IC_FeatureDerivation</li> <li>S100_IC_HybridFeature</li> </ul>						
Children	creationRule, featureRef, outputFeatureCode, outputProduct, primaryFeatureCode, primaryProduct, primarySelector, secondaryFeatureCode, secondaryProduct, secondarySelector						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>xs:Name</td> <td>required</td> </tr> </tbody> </table>	QName	Type	Use	<b>id</b>	xs:Name	required
QName	Type	Use					
<b>id</b>	xs:Name	required					
Source	<pre> &lt;xs:complexType name="S100_IC_HybridFeature"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="S100_IC_FeatureDerivation"&gt;       &lt;xs:sequence&gt;         &lt;xs:element name="creationRule" type="referenceType" minOccurs="1" maxOccurs="1"/&gt;       &lt;/xs:sequence&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;   </pre>						

## Complex Type S100\_IC\_SaturationOffset

Annotations	Saturation offsets for dusk and night relative to day palette.
Diagram	<pre> classDiagram     class S100_IC_SaturationOffset {         offsetDusk         offsetNight         product     }     note over S100_IC_SaturationOffset: used only in S100_IC_PredefinedCombination   </pre>
Children	offsetDusk, offsetNight, product
Source	<pre> &lt;xs:complexType name="S100_IC_SaturationOffset"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Saturation offsets for dusk and night relative to day palette.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt; &lt;/xs:complexType&gt;   </pre>

```
<xs:sequence>
  <xs:element name="product" type="dataProduct" minOccurs="0" maxOccurs="1">
    <xs:annotation>
      <xs:documentation>used only in S100_IC_PredefinedCombination</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="offsetDusk" minOccurs="1" maxOccurs="1">
    <xs:simpleType>
      <xs:restriction base="xs:decimal">
        <xs:minInclusive value="0.0"/>
        <xs:maxInclusive value="1.0"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="offsetNight" minOccurs="1" maxOccurs="1">
    <xs:simpleType>
      <xs:restriction base="xs:decimal">
        <xs:minInclusive value="0.0"/>
        <xs:maxInclusive value="1.0"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
</xs:sequence>
</xs:complexType>
```

## Complex Type S100\_IC\_InteroperabilityCatalogue

Diagram	<pre> classDiagram     class S100_Catalogue {         name         scope &lt;1..&gt;         fieldOfApplication         versionNumber         versionDate         language         locale         characterSet     }     class S100_IC_InteroperabilityCatalogue {         description         comment         digitalSignatureReference         digitalSignatureValue         requirementType         requirementDescription         productCovered &lt;1..&gt;         S100_IC_SaturationOffset         displayPlanes         predefinedProductCombinations         hybridizationRules         hybridPC &lt;0..&gt;         hybridFC &lt;0..&gt;     }     S100_Catalogue &lt; -- S100_IC_InteroperabilityCatalogue     note over S100_Catalogue: S100_Catalogue is in principle according to fig. 4a-D.1 and 4a-D.3 the supertype for FC, PC, and other catalogues (e.g....)   </pre>
Type	extension of S100_Catalogue
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_Catalogue           <ul style="list-style-type: none"> <li>• S100_IC_InteroperabilityCatalogue</li> </ul> </li> </ul>
Children	S100_IC_SaturationOffset, characterSet, comment, description, digitalSignatureReference, digitalSignatureValue, displayPlanes, fieldOfApplication, hybridFC, hybridPC, hybridizationRules, language, locale, name, predefinedProductCombinations, productCovered, requirementDescription, requirementType, scope, versionDate, versionNumber
Source	<code>&lt;xss:complexType name="S100_IC_InteroperabilityCatalogue"&gt;</code>

```

<xs:complexType>
  <xs:extension base="S100_Catalogue">
    <xs:sequence>
      <xs:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"/>
      <xs:element name="comment" type="xs:string" minOccurs="0" maxOccurs="1"/>
      <xs:element name="digitalSignatureReference" type="xs:string" minOccurs="1" maxOccurs="1"/>
      <xs:element name="digitalSignatureValue" type="xs:string" minOccurs="1" maxOccurs="1"/>
      <xs:element name="requirementType" type="requirementType" minOccurs="1" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>The type of authority or requestor responsible for the specifications, rules, or requirements based on which this catalogue was prepared.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="requirementDescription" type="xs:string" minOccurs="0" maxOccurs="1">
        <xs:annotation>
          <xs:documentation>Description of the source of the requirements or specifications upon which this catalogue is based. This might be the name of the country, company, OEM, port, pilot, etc.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="productCovered" type="dataProduct" minOccurs="1" maxOccurs="unbounded"/>
      <xs:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset">
        <xs:annotation>
          <xs:documentation>Default offset used for products that do not have a night/dusk portrayal</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="displayPlanes">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="S100_IC_DisplayPlane" type="S100_IC_DisplayPlane" minOccurs="1" maxOccurs="unbounded"/>
            <xs:sequence>
          </xs:complexType>
          <xs:key name="DPID">
            <xs:annotation>
              <xs:documentation>each display plane must have a unique identifier</xs:documentation>
            </xs:annotation>
            <xs:selector xpath="S100_IC_DisplayPlane"/>
            <xs:field xpath="identifier"/>
          </xs:key>
          <xs:key name="DPNM">
            <xs:annotation>
              <xs:documentation>each display plane must have a unique name</xs:documentation>
            </xs:annotation>
            <xs:selector xpath="S100_IC_DisplayPlane"/>
            <xs:field xpath="name"/>
          </xs:key>
          <xs:key name="DP_FCODE">
            <xs:annotation>
              <xs:documentation>each featureCode+product combination may appear in only 1 display plane</xs:documentation>
            </xs:annotation>
            <xs:selector xpath="S100_IC_DisplayPlane/features/S100_IC_Feature"/>
            <xs:field xpath="product"/>
            <xs:field xpath="featureCode"/>
          </xs:key>
          <xs:key name="DP_FID">
            <xs:annotation>
              <xs:documentation>each feature in a display plane has a unique id</xs:documentation>
            </xs:annotation>
            <xs:selector xpath="S100_IC_DisplayPlane/features/S100_IC_Feature"/>
            <xs:field xpath="@id"/>
          </xs:key>
        </xs:element>
        <xs:element name="predefinedProductCombinations">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="S100_IC_PredefinedCombination" type="S100_IC_PredefinedCombination" minOccurs="0" maxOccurs="unbounded"/>
            </xs:sequence>
          </xs:complexType>
          <xs:key name="PDCID">
            <xs:annotation>
              <xs:documentation>Each PDC must have a unique identifier</xs:documentation>
            </xs:annotation>
            <xs:selector xpath="S100_IC_PredefinedCombination"/>
            <xs:field xpath="identifier"/>
          </xs:key>
          <xs:key name="PDCNM">
            <xs:annotation>
              <xs:documentation>Each PDC must have a unique name</xs:documentation>
            </xs:annotation>
          </xs:key>
        </xs:element>
      </xs:sequence>
    </xs:extension>
  </xs:complexType>

```

```

<xs:selector xpath="S100_IC_PredefinedCombination" />
<xs:field xpath="name" />
</xs:key>
</xs:element>
<xs:element name="hybridizationRules">
<xs:complexType>
<xs:sequence>
<xs:element name="S100_IC_SimpleRule" type="S100_IC_SimpleRule" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="S100_IC_ThematicRule" type="S100_IC_ThematicRule" minOccurs="0"
maxOccurs="unbounded" />
<xs:element name="S100_IC_CompleteRule" type="S100_IC_CompleteRule" minOccurs="0"
maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
<xs:key names="RULE_IDENTIFIER">
<xs:annotation>
<xs:documentation>Each rule must have a unique ruleIdentifier</xs:documentation>
</xs:annotation>
<xs:selector xpath="*" />
<xs:field xpath="ruleIdentifier" />
</xs:key>
</xs:element>
<xs:element name="hybridPC" minOccurs="0" maxOccurs="unbounded">
<xs:complexType>
<xs:annotation>
<xs:documentation>Reference to the hybrid portrayals catalogue</xs:documentation>
</xs:annotation>
<xs:sequence>
<xs:element name="S100_IC_HybridPC" type="xs:anyURI" minOccurs="0"
maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="hybridFC" minOccurs="0" maxOccurs="unbounded">
<xs:complexType>
<xs:annotation>
<xs:documentation>Reference to the hybrid features catalogue</xs:documentation>
</xs:annotation>
<xs:sequence>
<xs:element name="S100_IC_HybridFC" type="xs:anyURI" minOccurs="0"
maxOccurs="unbounded" />
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

```

## Complex Type S100\_Catalogue

Annotations	S100_Catalogue is in principle according to fig. 4a-D.1 and 4a-D.3 the supertype for FC, PC, and other catalogues (e.g., CRS Catalogue) and does not play a role in the Exchange Catalogue.
-------------	---

Diagram	<pre> classDiagram     class S100_Catalogue {         name : string         scope : string         fieldOfApplication : string         versionNumber : string         versionDate : gco:Date_Type         language : string         locale : gmd:PT_Locale_Type         characterSet : gmd:MD_CharacterSetCode_PropertyType     }     note over S100_Catalogue: S100_Catalogue is in principle according to fig. 4a-D.1 and 4a-D.3 the supertype for FC, PC, and other catalogues (e.g., CRS Catalogue) and does not play a role in the Exchange Catalogue.   </pre>
Children	characterSet, fieldOfApplication, language, locale, name, scope, versionDate, versionNumber
Source	<pre> &lt;xs:complexType name="S100_Catalogue"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;S100_Catalogue is in principle according to fig. 4a-D.1 and 4a-D.3 the supertype for FC, PC, and other catalogues (e.g., CRS Catalogue) and does not play a role in the Exchange Catalogue.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The name for the catalogue&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="scope" type="xs:string" minOccurs="1" maxOccurs="unbounded"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Subject domain of the catalogue.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="fieldOfApplication" type="xs:string" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Description of the use to which this catalogue may be put.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="versionNumber" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The version number of the product specification.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="versionDate" type="gco:Date_Type" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The version date of the product specification.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="language" type="xs:string" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;The language used for this catalogue.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="locale" type="gmd:PT_Locale_Type" minOccurs="0" maxOccurs="1"/&gt;     &lt;xs:element name="characterSet" type="gmd:MD_CharacterSetCode_PropertyType" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Character set used in the catalogue.&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;   &lt;/xs:sequence&gt; &lt;/xs:complexType&gt;   </pre>

## Complex Type S100\_IC\_DisplayPlane

Annotations	Each display plane identifies all features and their draw orders within the plane. Display priority defines the order in which display planes are rendered.
Diagram	<pre> classDiagram     class S100_IC_DisplayPlane {         identifier         name         displayPriority         description         S100_IC_SaturationOffset         features     }     note over S100_IC_DisplayPlane: Each display plane identifies all features and their draw orders within the plane. Display priority defines the order...   </pre>
Children	S100_IC_SaturationOffset, description, displayPriority, features, identifier, name
Source	<pre> &lt;xs:complexType name="S100_IC_DisplayPlane"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Each display plane identifies all features and their draw orders within the plane. Display priority defines the order in which display planes are rendered.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="identifier" type="xs:integer" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="name" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="displayPriority" type="xs:integer" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="description" type="xs:string" minOccurs="1" maxOccurs="1"/&gt;     &lt;xs:element name="S100_IC_SaturationOffset" type="S100_IC_SaturationOffset" minOccurs="0" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Default offset used for features in this display plane that do not have a night/dusk portrayal&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;     &lt;xs:element name="features"&gt;       &lt;xs:complexType&gt;         &lt;xs:sequence&gt;           &lt;xs:element name="S100_IC_Feature" type="S100_IC_Feature" minOccurs="1" maxOccurs="unbounded"/&gt;         &lt;/xs:sequence&gt;       &lt;/xs:complexType&gt;     &lt;/xs:element&gt;   &lt;/xs:sequence&gt; &lt;/xs:complexType&gt;   </pre>

## Complex Type S100\_IC\_SimpleRule

Diagram	<pre> classDiagram     class S100_IC_HybridFeatureCreationRule {         &lt;&lt;extension base&gt;&gt;         Abstract   true     }     class S100_IC_SimpleRule {         Base Type   S100_IC_HybridFeatureCreationRule         Content   complex     }     S100_IC_SimpleRule --&gt; S100_IC_HybridFeatureCreationRule     S100_IC_SimpleRule "1" *--&gt; ruleIdentifier     note over S100_IC_SimpleRule: Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...   </pre>
Type	extension of S100_IC_HybridFeatureCreationRule
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule             <ul style="list-style-type: none"> <li>• S100_IC_SimpleRule</li> </ul> </li> </ul>
Children	ruleIdentifier

Attributes	QName	Type	Use
	<b>id</b>	xs:Name	required
Source	<pre>&lt;xs:complexType name="S100_IC_SimpleRule"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="S100_IC_HybridFeatureCreationRule"&gt;       &lt;xs:sequence/&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;</pre>		

## Complex Type S100\_IC\_HybridFeatureCreationRule

Annotations	<p>Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as well as the entire processing logic.</p> <p>This functionality needs to be worked out but OGC Filter seems to be the ideal option for defining data filtering logic.</p> <p>Overall, the output from execution of HybridFeatureCreationRule is a set of hybrid features for which predefined FC, PC and DP definitions already exist so such feature will be suitable for passing to the portrayal engine for processing just like any other S100 features.</p>						
Diagram	<pre> classDiagram     class S100_IC_HybridFeatureCreationRule {         &lt;&lt;Abstract&gt;&gt; true     }     class Attributes {         @ id         Type xs:Name     }     class ruleIdentifier {         Rule identifier     }      S100_IC_HybridFeatureCreationRule "1" -- "*" Attributes     S100_IC_HybridFeatureCreationRule "1" -- "*" ruleIdentifier     Attributes "*" --&gt; ruleIdentifier   </pre> <p>The diagram shows the UML Class Diagram for the S100_IC_HybridFeatureCreationRule. It consists of three classes: S100_IC_HybridFeatureCreationRule, Attributes, and ruleIdentifier. The S100_IC_HybridFeatureCreationRule class is marked as abstract and has two associations with the Attributes class (multiplicity 1..* at both ends) and one association with the ruleIdentifier class (multiplicity 1..* at the S100_IC_HybridFeatureCreationRule end). The Attributes class has a multiplicity of * at its end of the association with ruleIdentifier. A note below the S100_IC_HybridFeatureCreationRule class states: "Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...".</p>						
Properties	abstract: true						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th> <th>Type</th> <th>Use</th> </tr> </thead> <tbody> <tr> <td><b>id</b></td> <td>xs:Name</td> <td>required</td></tr> </tbody> </table>	QName	Type	Use	<b>id</b>	xs:Name	required
QName	Type	Use					
<b>id</b>	xs:Name	required					
Source	<pre>&lt;xs:complexType name="S100_IC_HybridFeatureCreationRule" abstract="true"&gt;   &lt;xs:annotation&gt;     &lt;xs:documentation&gt;Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as well as the entire processing logic. This functionality needs to be worked out but OGC Filter seems to be the ideal option for defining data filtering logic. Overall, the output from execution of HybridFeatureCreationRule is a set of hybrid features for which predefined FC, PC and DP definitions already exist so such feature will be suitable for passing to the portrayal engine for processing just like any other S100 features.&lt;/xs:documentation&gt;   &lt;/xs:annotation&gt;   &lt;xs:sequence&gt;     &lt;xs:element name="ruleIdentifier" type="xs:string" minOccurs="1" maxOccurs="1"&gt;       &lt;xs:annotation&gt;         &lt;xs:documentation&gt;Rule identifier&lt;/xs:documentation&gt;       &lt;/xs:annotation&gt;     &lt;/xs:element&gt;   &lt;/xs:sequence&gt;   &lt;xs:attribute name="id" type="xs:Name" use="required"/&gt; &lt;/xs:complexType&gt;</pre>						

## Complex Type S100\_IC\_ThematicRule

Diagram	<p>S100_IC_HybridFeatureCreationRule (extension base) Abstract   true</p> <p><b>@ Attributes</b></p> <ul style="list-style-type: none"> <li>id (Type: xs:Name)</li> </ul> <p>ruleIdentifier (Rule identifier)</p> <p>Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...</p>						
Type	extension of S100_IC_HybridFeatureCreationRule						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule             <ul style="list-style-type: none"> <li>• S100_IC_ThematicRule</li> </ul> </li> </ul>						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th></tr> </thead> <tbody> <tr> <td>id</td><td>xs:Name</td><td>required</td></tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre>&lt;xs:complexType name="S100_IC_ThematicRule"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="S100_IC_HybridFeatureCreationRule"&gt;       &lt;xs:sequence/&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;</pre>						

## Complex Type S100\_IC\_CompleteRule

Diagram	<p>S100_IC_HybridFeatureCreationRule (extension base) Abstract   true</p> <p><b>@ Attributes</b></p> <ul style="list-style-type: none"> <li>id (Type: xs:Name)</li> </ul> <p>ruleIdentifier (Rule identifier)</p> <p>Hybrid feature creation rule captures the entire data filtering logic (i.e. finding all features to be operated on) as...</p>						
Type	extension of S100_IC_HybridFeatureCreationRule						
Type hierarchy	<ul style="list-style-type: none"> <li>• S100_IC_HybridFeatureCreationRule             <ul style="list-style-type: none"> <li>• S100_IC_CompleteRule</li> </ul> </li> </ul>						
Children	ruleIdentifier						
Attributes	<table border="1"> <thead> <tr> <th>QName</th><th>Type</th><th>Use</th></tr> </thead> <tbody> <tr> <td>id</td><td>xs:Name</td><td>required</td></tr> </tbody> </table>	QName	Type	Use	id	xs:Name	required
QName	Type	Use					
id	xs:Name	required					
Source	<pre>&lt;xs:complexType name="S100_IC_CompleteRule"&gt;   &lt;xs:complexContent&gt;     &lt;xs:extension base="S100_IC_HybridFeatureCreationRule"&gt;       &lt;xs:sequence/&gt;     &lt;/xs:extension&gt;   &lt;/xs:complexContent&gt; &lt;/xs:complexType&gt;</pre>						

<pre>&lt;/xs:complexType&gt;</pre>
------------------------------------

## Attribute(s)

### Attribute **S100\_IC\_Feature / @id**

Type	xs:Name
Properties	use: required
Source	<pre>&lt;xs:attribute name="id" type="xs:Name" use="required"/&gt;</pre>

### Attribute **S100\_IC\_SuppressedFeatureLayer / @id**

Type	xs:Name
Properties	use: required
Source	<pre>&lt;xs:attribute name="id" type="xs:Name" use="required"/&gt;</pre>

### Attribute **S100\_IC\_FeatureDerivation / @id**

Type	xs:Name
Properties	use: required
Source	<pre>&lt;xs:attribute name="id" type="xs:Name" use="required"/&gt;</pre>

### Attribute **S100\_IC\_HybridFeatureCreationRule / @id**

Type	xs:Name
Properties	use: required
Source	<pre>&lt;xs:attribute name="id" type="xs:Name" use="required"/&gt;</pre>