Title: Allow empty display modes

S-100 Maintenance - Change Proposal Form

|  |  |  |  |
| --- | --- | --- | --- |
| **Organisation** | NIWC | **Date** | 11/23/2021 |
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Change Proposal Type *(Select only one option)*

|  |  |  |
| --- | --- | --- |
| 1.Clarification | 2.Correction | 3.Extension |
|  | X |  |

Location (*Identify all change proposal locations)*

|  |  |  |  |
| --- | --- | --- | --- |
| S-100 Version No. | Part No. | Section No. | Proposal Summary |
| 5.0 Draft redline | 9 | Figure 9-20  9-13.3.18 | Update UML diagram  Change lower multiplicity of viewingGroupLayer to 0. |

Change Proposal

See attached.

Change Proposal Justification

The current portrayal catalogue schema requires that each display mode includes at least one viewing group layer.

Products intended for use in ECDIS should support *Base*, *Standard* and *All Other* display modes, however they may not have any viewing group layers for a given display mode.

For instance, if a product such as S-111 has a single viewing group which is in „Other“ it will not have any viewing group layers to populate „Base“ and „Standard“. It should still provide (empty) „Base“ and „Standard“ display modes in its portrayal catalogue to clearly indicate that it‘s portrayal is toggled off in those modes.

What parts of the S-100 Infrastructure will this proposal affect?

S-100 Feature Concept Dictionary Interface or Database

S-100 Portrayal Register

S-100 Feature Catalogue Builder

S-100 Portrayal Catalogue Builder

S-100 UML Models

S-100 GitHub Schemas

**Please send completed forms and supporting documentation to the secretary S-100WG.**

**A screenshot of a cell phone

Description automatically generated**

### DisplayMode

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role Name** | **Name** | **Description** | **Mult.** | **Type** |
| Class | DisplayMode | A set of Viewing Layers to switch on or off in an application | - | - |
| Subtype of | CatalogItem | See CatalogItem | - | - |
| Role | viewingGroupLayer | Viewing Group Layer included in this Display Mode | ~~1~~0..\* | ViewingGroupLayer |

**S100PortrayalCatalog.xsd**

<!-- Class for a display mode (an aggregation of viewing group layers) -->

<xs:complexType name="DisplayMode">

<xs:complexContent>

<xs:extension base="CatalogItem">

<xs:sequence>

<xs:element name="viewingGroupLayer"

type="s100Symbol:IdString"

minOccurs="~~1~~0"

maxOccurs="unbounded"/>

</xs:sequence>

</xs:extension>

</xs:complexContent>

</xs:complexType>