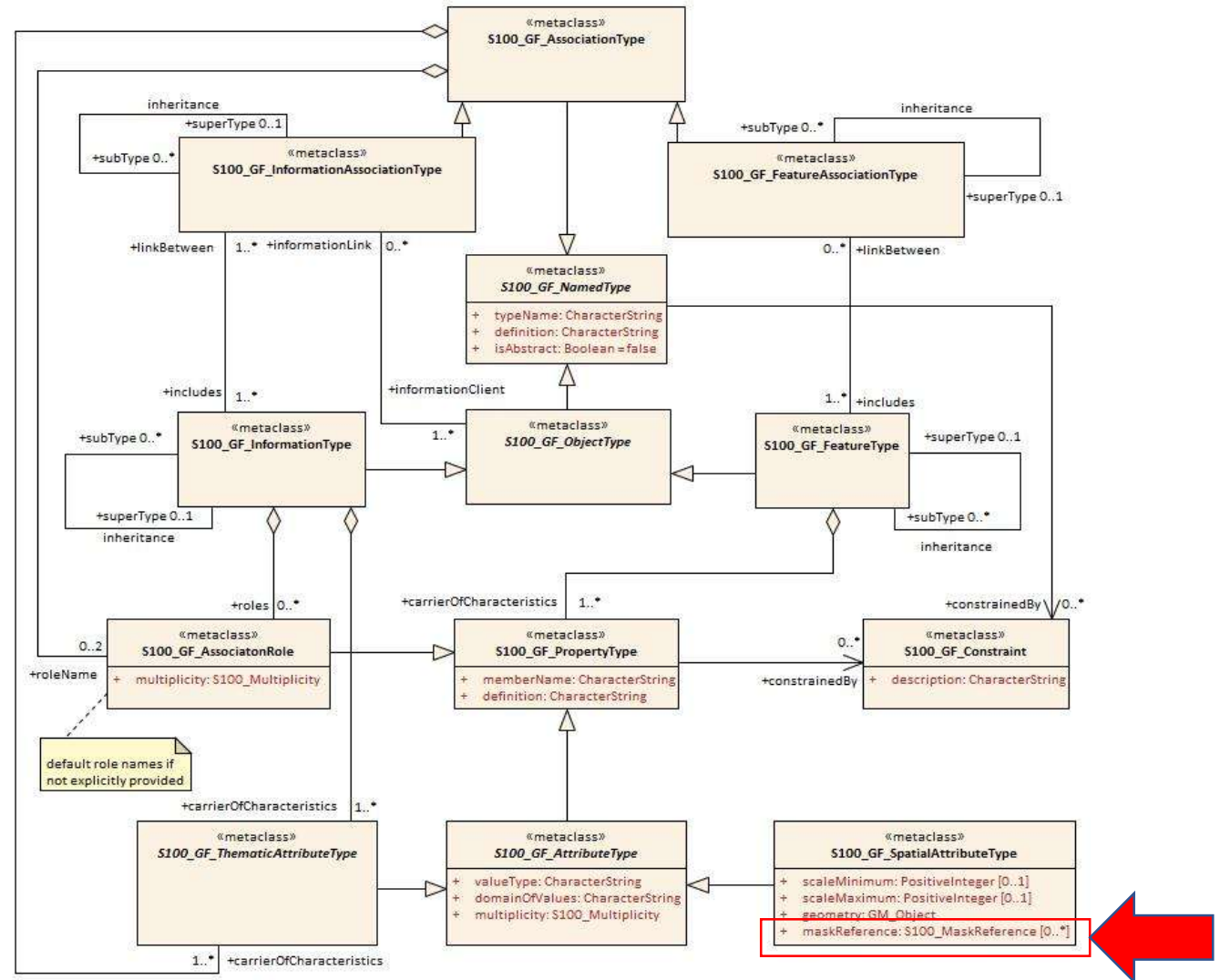


Proposal to add masking
function to GFM

Proposal part 1

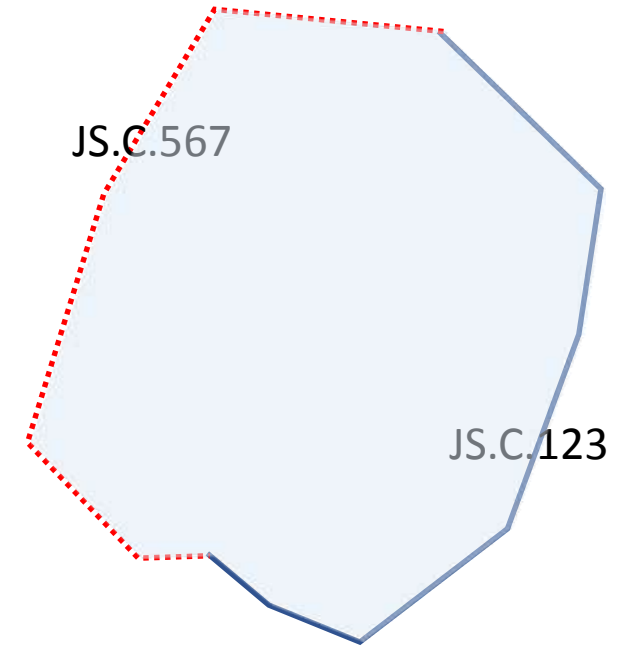
Adding a masking reference attribute on the spatial attribute type.



Example 1

```
<S100:Curve gml:id="JS.C.567" srsDimension="2" srsName="urn:ogc:def:crs:EPSG::4326">
  <gml:segments>
    <S100:S100_GM_Curve>
      <gml:posList>-33.5032709 60.8896517 -33.5912323 60.7716521 -33.6539623 60.
    </S100:S100_GM_Curve>
  </gml:segments>
</S100:Curve>

<S127:MilitaryPracticeArea gml:id="JS.MIPARE.676">
  <featureName><name>Jussland Naval Firing Area</name></featureName>
  <textContent><information><text>Example of masked spatial type</text></inform
  <theServiceHours xlink:href="#JS.SRVHRS.685"/>
  <geometry>
    <S100:surfaceProperty scaleMinimum="1000000" scaleMaximum="10000">
      <S100:maskReference xlink:href="#JS.C.567" xlink:role="suppressed"/>
      <S100:Surface gml:id="JS.MIPARE.676.S.1" srsDimension="2" srsName="u
        <gml:patches><gml:PolygonPatch><gml:exterior>
          <gml:Ring>
            <gml:curveMember xlink:href="#JS.C.123"/>
            <gml:curveMember xlink:href="#JS.C.567"/>
          </gml:Ring>
        </gml:exterior></gml:PolygonPatch></gml:patches>
      </S100:Surface>
    </S100:surfaceProperty>
  </geometry>
</geometry>
```

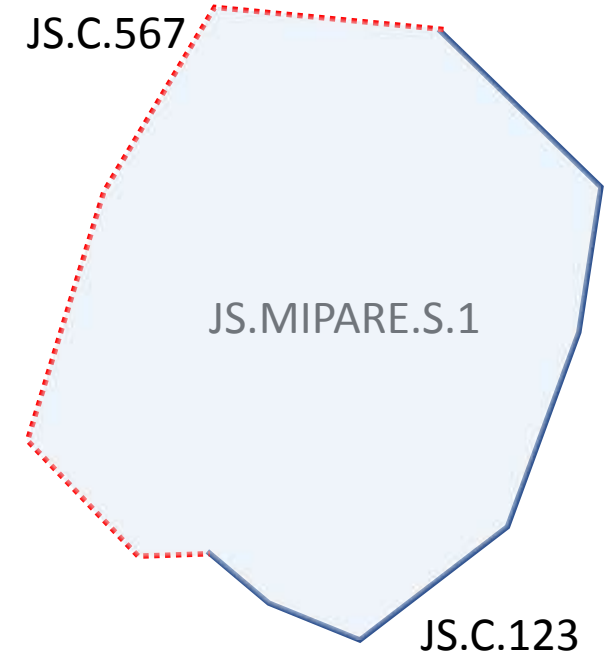


Example 1A

```
<S100:Curve gml:id="JS.C.567" srsDimension="2" srsName="urn:ogc:def:crs:EPSG::4326">
  <gml:segments>
    <S100:S100_GM_Curve>
      <gml:posList>-33.5032709 60.8896517 -33.5912323 60.7716521 -33.6539623 60.
    </S100:S100_GM_Curve>
  </gml:segments>
</S100:Curve>

<S100:Surface gml:id="JS.MIPARE.S.1" srsDimension="2" srsName="urn:ogc:def:crs:EPSG::4326">
  <gml:patches><gml:PolygonPatch><gml:exterior>
    <gml:Ring>
      <gml:curveMember xlink:href="#JS.C.123"/>
      <gml:curveMember xlink:href="#JS.C.567"/>
    </gml:Ring>
  </gml:exterior></gml:PolygonPatch></gml:patches>
</S100:Surface>

<S127:MilitaryPracticeArea gml:id="JS.MIPARE.676">
  <featureName><name>Jussland Naval Firing Area</name></featureName>
  <textContent><information><text>Example of masked spatial type</text></information></textContent>
  <theServiceHours xlink:href="#JS.SRVHRS.685"/>
  <geometry>
    <S100:surfaceProperty xlink:href="#JS.MIPARE.S.1" scaleMinimum="1000000" scaleMaximum="10000">
      <S100:maskReference xlink:href="#JS.C.567" link:role="suppressed"/>
    </S100:surfaceProperty>
  </geometry>
</S127:MilitaryPracticeArea>
```



Proposal part 3

Part 10a – ISO 8211 format:

10a-5.11.6 Masked Spatial Type field structure

Field Tag: MASK	Field Name: Masked Spatial Type
-----------------	---------------------------------

Subfield name	Label	Format	Subfield content and specification
Referenced Record name	*RRNM	b11	Record name of the referenced record
Referenced Record identifier	RRID	b14	Record identifier of the referenced record
Mask Indicator	MIND	b11	{1} – Truncated by the dataset limit {2} – Suppress portrayal
Mask Update Instruction	MUIN	b11	{1} - Insert {2} - Delete

Data Descriptive Field

2100; &□□□Masked□Spatial□Record▲*RRNM!RRID!MIND!MUIN▲(b11,b14,2b11)▼
--

The *Referenced Record identifier* field corresponds to the *spatialRef* attribute of S100_MaskReference (Part 3, Table 3-14). The *Mask Indicator* field corresponds to the *maskIndicator* attribute of S100_MaskReference.

Proposal part 4

Part 10b – GML format:

10b-8.5.6 Masking, truncation, and scale ranges

Beginning with Edition 4.1, the S-100 GML format defines a generic complex type `S100_SpatialAttributeType` for spatial attributes with *scaleMinimum* and *scaleMaximum* attributes and a *maskReference* tag. These correspond to the attributes of the `S100_SpatialAttribute` metaclass in the S-100 General Feature Model (Part 3, Figures 3-1 and 3-2 and clause 3-5.3.5). *scaleMinimum* and *scaleMaximum* are implemented as integer attributes. The *maskReference* attribute is implemented using the GML Reference Type with the following constraints:

The value of the `xlink:href` attribute must be the `gml:id` of the masked/truncated object.

The value of the `xlink:role` attribute must be either 'truncated' or 'suppressed'.

The meaning of other attributes is undefined in S-100. Product specifications may specify their use depending on the needs of the data product.

Questions?