

# 11 Portrayal

This clause defines the rules for layers and styles to be used for portrayal of the spatial object types defined for this theme. Portrayal is regulated in Article 14 of the IRs.

## IR Requirement

### Article 14

#### Portrayal

1. For the portrayal of spatial data sets using a view network service as specified in Commission Regulation No 976/2009 <sup>(1)</sup>, the following shall be available:
  - (a) the layers specified in Annex II for the theme or themes the data set is related to;
  - (b) for each layer at least a default portrayal style, with as a minimum an associated title and a unique identifier.
2. For each layer, Annex II defines the following:
  - (a) a human readable title of the layer to be used for display in user interface;
  - (b) the spatial object type(s), or sub-set thereof, that constitute(s) the content of the layer.

In section 11.3, the *types* of layers are defined that are to be used for the portrayal of the spatial object types defined in this specification. A view service may offer several layers of the same type, one for each dataset that it offers data on a specific topic.

**NOTE** The layer specification in the IRs only contains the name, a human readable title and the (subset(s) of) spatial object type(s), that constitute(s) the content of the layer. In addition, these Technical Guidelines suggest keywords for describing the layer.

**Recommendation 1** It is recommended to use the keywords specified in section 11.3 in the *Layers Metadata parameters* of the INSPIRE View service (see Annex III, Part A, section 2.2.4 in Commission Regulation (EC) No 976/2009).

Section 0 specifies one style for each of these layers. It is proposed that INSPIRE view services support this style as the default style required by Article 14(1b).

**TG Requirement 1** For each layer specified in this section, the styles defined in section 0 shall be available.

**NOTE** The default style should be used for portrayal by the view network service if no user-defined style is specified in a portrayal request for a specific layer.

In section 11.3, further styles can be specified that represent examples of styles typically used in a thematic domain. It is recommended that also these styles should be supported by INSPIRE view services, where applicable.

**Recommendation 2** In addition, it is recommended that, where applicable, INSPIRE view services also support the styles defined in section 11.3.

Where XML fragments are used in the following sections, the following namespace prefixes apply:

- sld="http://www.opengis.net/sld" (WMS/SLD 1.1)
- se="http://www.opengis.net/se" (SE 1.1)
- ogc="http://www.opengis.net/ogc" (FE 1.1)

## 11.1 Layers to be provided by INSPIRE view services

This clause defines the rules for layers and styles to be used for portrayal of the spatial object types defined for the *Agricultural and Aquaculture Facilities* theme.

The *Agricultural and Aquaculture Facilities* theme is represented with four different type map layers:

- Holding: The geographical representation of entities inside which Agricultural and Aquaculture activities are carried out.
- Sites: All land at a distinct geographic location under the management control of Holding covering activities, products and services. This includes all infrastructure, equipment and materials;
- Abstract Installations: Natural or engineered units or apparatus performing activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;
- Plots: Independent portion of the land or water surface, clearly delimited, including or matching the limits of the Sites described for a Holding.

Layer Name	Layer Title	Spatial object type(s)	Keywords
AF.AgriculturalHolding	Agricultural Holding	Holding	Holding, Agriculture, Animal Farming, Establishment, Activity Complex, Facility
AF.AquacultureHolding	Aquaculture Holding	Holding	Holding, Aquaculture Fish Farming, Establishment, Activity Complex, Facility
AF.Sites	Agricultural and Aquaculture Site	Site	Site, Parcel, Polygon, Land, Pasture, Fence.
AF.AbstractInstallation	Agricultural and Aquaculture Integrated Installations	AbstractInstallation	Installation, Plant, Technical unit, technical apparatus.
AF.Plots	Agricultural and Aquaculture Integrated Plots	Plot	Plots, Fenced Area, Rearing Area. Relaying Area.
AF.Agribuilding	Agricultural and Aquaculture Building	AgriBuilding	Agribuilding, Barn, Storage, Storm, Animal Housing, Greenhouse, Garage, Technical installation

### IR Requirement

#### Article 14

#### Portrayal

(...)

- For spatial object types whose objects can be further classified using a code list-valued attribute, several layers may be defined. Each of these layers shall include the spatial objects corresponding to one specific code list value. In the definition of such sets of layers in Annexes II-IV,
  - the placeholder <CodeListValue> shall represent the values of the relevant code list, with the first letter in upper case,

- |   |
|---|
| <ul style="list-style-type: none"><li>(b) the placeholder &lt;human-readable name&gt; shall represent the human-readable name of the code list values;</li><li>(c) the spatial object type shall include the relevant attribute and code list, in parentheses;</li><li>(d) one example of a layer shall be given.</li></ul> |
|---|

### 11.1.1 Layers organisation

The next hierarchy is recommended to be implemented:

**Concerning Holdings:** Two types of map layers namely *Agricultural Holdings* and *Aquaculture Holding*, one for each based on the NACE activity sub-group (Section A - Second Level).

A - Agriculture, forestry and fishing

**A1 - Crop and animal production, hunting and related service activities**

- A1.1 - Growing of non-perennial crops
- A1.2 - Growing of perennial crops
- A1.3 - Plant propagation
- A1.4 - Animal production
- A1.5 - Mixed farming
- A1.6 - Support activities to agriculture and post-harvest crop activities
- A1.7 - Hunting, trapping and related service activities

**A2 - Forestry and logging** (**A2 - Forestry and logging** not required)

**A3 - Fishing and aquaculture**

- A3.1 - Fishing
- A3.2 - Aquaculture

This classification allows distinguish among Agricultural (A-A1) and Aquaculture (A-A3). In a more advanced steps there could be also another level of detail (third level of detail on the NACE hierarchy). Portrayal is not defined because currently there is not an agreement in the communities about it.

**Concerning Sites:** Only one type layer. Effectively it could be other map layers based on subset as result of the “Activity classification” applied or derived from the Holding to which are linked.

**Concerning Installations:** Only one type layer. Effectively it could be other map layers based on subset as result of the extension of Installation (Irrigation, Water Management, Aquaculture).

**Concerning Plots:** Only one type layer.

**Concerning Agri-Building:** Only one type layer.

## 11.2 Styles to be supported by INSPIRE view services

### 11.2.1 Styles for the layer AF.AgriculturalHolding

<b>Style Name</b>	<b>AF.AgriculturalHolding</b>
<b>Default Style</b>	Yes
<b>Style Title</b>	Agricultural Holding Default Style
<b>Style Abstract</b>	The geometry is rendered as a circle with a size of 3 pixels, with a green (#008000) fill and a black outline (#000000).
<b>Symbology</b>	<pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt; AF.AgriculturalHolding&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt; AF.AgriculturalHolding.Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt; Agricultural Holding Default Style &lt;/se:Title&gt;         &lt;se:Abstract&gt;The geometry is rendered as a circle with a size of 3 pixels, with a green  (#008000) fill and a black outline (#000000).&lt;/se:Abstract&gt;       &lt;/se:Description&gt;       &lt;se:FeatureTypeName&gt; AF.AgriculturalHolding&lt;/se:FeatureTypeName&gt;       &lt;se:Rule&gt;         &lt;se:PointSymbolizer&gt;           &lt;se:Geometry&gt;             &lt;ogc:PropertyName&gt;Holding:geometry&lt;/ogc:PropertyName&gt;           &lt;/se:Geometry&gt;           &lt;se:Graphic/&gt;         &lt;/se:PointSymbolizer&gt;       &lt;/se:Rule&gt;     &lt;/se:FeatureTypeStyle&gt;   &lt;/sld:UserStyle&gt; &lt;/sld:NamedLayer&gt; </pre>
<b>Minimum &amp; maximum scales</b>	Open - 1:25 000

### 11.2.2 Styles for the layer AF.AquacultureHolding

<b>Style Name</b>	<b>AF.AquacultureHolding</b>
<b>Default Style</b>	Yes
<b>Style Title</b>	Aquaculture Holding Default Style
<b>Style Abstract</b>	The geometry is rendered as a circle with a size of 3 pixels, with a blue fill (#0000FF) and a black outline (#000000).
<b>Symbology</b>	<pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt;AF.AquacultureHolding&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt; AF.AquacultureHolding.Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt; Aquaculture Holding Default Style &lt;/se:Title&gt;         &lt;se:Abstract&gt;The geometry is rendered as a circle with a size of 3 </pre>

	<pre> pixels, with a blue (#0000FF) fill and a black outline (#000000).&lt;/se:Abstract&gt; &lt;/se:Description&gt; &lt;se:FeatureTypeName&gt;AF.AquacultureHolding&lt;/se:FeatureTypeName&gt; &lt;se:Rule&gt;   &lt;se:PointSymbolizer&gt;     &lt;se:Geometry&gt;       &lt;ogc:PropertyName&gt;Holding:geometry     &lt;/ogc:PropertyName&gt;     &lt;/se:Geometry&gt;     &lt;se:Graphic/&gt;   &lt;/se:PointSymbolizer&gt; &lt;/se:Rule&gt; &lt;/se:FeatureTypeStyle&gt; &lt;/sld:UserStyle&gt; &lt;/sld:NamedLayer&gt; </pre>
<b>Minimum &amp; maximum scales</b>	Open - 1:25 000

### 11.2.3 Styles for the layer AF.Site

<b>Style Name</b>	<b>AF.Site</b>
<b>Default Style</b>	Yes
<b>Style Title</b>	Agricultural and Aquaculture Site Default Style
<b>Style Abstract</b>	This layer type is for representation of Agricultural and Aquaculture Sites as Points or Polygons
<b>Symbology</b>	<p><b>For Polygon geometry:</b></p> <pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt; AF.Sites.Default&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt;INSPIRE_Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt;Agricultural and Aquaculture Site Default Style&lt;/se:Title&gt;         &lt;se:Abstract&gt;The geometry is rendered using a 50% grey (#808080) fill and a solid blue (#0000FF) outline with a stroke width of 1 pixel.&lt;/se:Abstract&gt;       &lt;/se:Description&gt;       &lt;se:FeatureTypeName&gt;AF.Site&lt;/se:FeatureTypeName&gt;       &lt;se:Rule&gt;         &lt;se:PolygonSymbolizer&gt;           &lt;se:Geometry&gt;             &lt;ogc:PropertyName&gt;AFSite.geometry&lt;/ogc:PropertyName&gt;           &lt;/se:Geometry&gt;           &lt;se:Fill/&gt;           &lt;se:Stroke/&gt;         &lt;/se:PolygonSymbolizer&gt;       &lt;/se:Rule&gt;     &lt;/se:FeatureTypeStyle&gt;   &lt;/sld:UserStyle&gt; &lt;/sld:NamedLayer&gt; </pre> <p><b>For Point geometry:</b></p> <pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt;AF.Site&lt;/se:Name&gt; </pre>

	<pre> &lt;sld:UserStyle&gt;   &lt;se:Name&gt; AF.Site.Default&lt;/se:Name&gt;   &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;   &lt;se:FeatureTypeStyle version="1.1.0"&gt;     &lt;se:Description&gt;       &lt;se:Title&gt; Agriculture and Aquaculture Sites Default Style     &lt;/se:Title&gt;     &lt;se:Abstract&gt;The geometry is rendered as a circle with a size of 3 pixels, a 50% grey (#808080) fill and and a solid blue (#0000FF)     &lt;/se:Abstract&gt;     &lt;/se:Description&gt;     &lt;se:FeatureTypeName&gt;AF.Site&lt;/se:FeatureTypeName&gt;     &lt;se:Rule&gt;       &lt;se:PointSymbolizer&gt;         &lt;se:Geometry&gt;           &lt;ogc:PropertyName&gt;Site:geometry         &lt;/ogc:PropertyName&gt;         &lt;/se:Geometry&gt;         &lt;se:Graphic/&gt;       &lt;/se:PointSymbolizer&gt;     &lt;/se:Rule&gt;   &lt;/se:FeatureTypeStyle&gt; &lt;/sld:UserStyle&gt; &lt;/sld:NamedLayer&gt; </pre>
<b>Minimum &amp; maximum scales</b>	1:25.000 – 1:5.000

## 11.2.4 Styles for the layer AF.AbstractInstallation

<b>Style Name</b>	<b>AF.AbstractInstallation</b>
<b>Default Style</b>	Yes
<b>Style Title</b>	Agricultural and Aquaculture Abstract Installation Default Style
<b>Style Abstract</b>	The geometry is rendered as a circle with a size of 3 pixels, with a Pink (#FF00FF) fill and a black outline (#000000).
<b>Symbology</b>	<pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt; AF.AbstractInstallation.Default&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt;INSPIRE_Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt;Agricultural and Aquaculture AbstractInstallation Default Style&lt;/se:Title&gt;         &lt;se:Abstract&gt; The geometry is rendered as a circle with a size of 3 pixel, with a Pink (#FF00FF) fill and a black outline (#000000)&lt;/se:Abstract&gt;       &lt;/se:Description&gt;       &lt;se:FeatureTypeName&gt;AF.AbstractInstallation&lt;/se:FeatureTypeName&gt;       &lt;se:Rule&gt;         &lt;se:PolygonSymbolizer&gt;           &lt;se:Geometry&gt;             &lt;ogc:PropertyName&gt;AbstractInstallation.geometry&lt;/ogc:PropertyName&gt;           &lt;/se:Geometry&gt;           &lt;se:Fill/&gt;           &lt;se:Stroke/&gt;         &lt;/se:PolygonSymbolizer&gt;       &lt;/se:Rule&gt;     &lt;/se:FeatureTypeStyle&gt;   &lt;/sld:UserStyle&gt; </pre>

	</sld:NamedLayer>
<b>Minimum &amp; maximum scales</b>	1:25.000 – 1:1.000

### 11.2.5 Styles for the layer AF.Plot

<b>Style Name</b>	<b>AF.Plot</b>
<b>Default Style</b>	AF.Plot.Default
<b>Style Title</b>	Agricultural and Aquaculture Plot Default Style
<b>Style Abstract</b>	The geometry is rendered using a grey (#808080) fill and a solid Yellow (rgb=#FFFF00) outline with a stroke width of 1 pixel.
<b>Symbology</b>	<pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt; AF.Plot.Default&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt;INSPIRE_Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt;Agricultural and Aquaculture Plot Default Style&lt;/se:Title&gt;         &lt;se:Abstract&gt;The geometry is rendered using a 50% grey (#808080) fill and a solid Yellow (rgb=#FFFF00) outline with a stroke width of 1 pixel &lt;/se:Abstract&gt;       &lt;/se:Description&gt;       &lt;se:FeatureTypeName&gt;AF.Plot&lt;/se:FeatureTypeName&gt;       &lt;se:Rule&gt;         &lt;se:PolygonSymbolizer&gt;           &lt;se:Geometry&gt;             &lt;ogc:PropertyName&gt;Plot.geometry&lt;/ogc:PropertyName&gt;           &lt;/se:Geometry&gt;           &lt;se:Fill/&gt;           &lt;se:Stroke/&gt;         &lt;/se:PolygonSymbolizer&gt;       &lt;/se:Rule&gt;     &lt;/se:FeatureTypeStyle&gt;   &lt;/sld:UserStyle&gt; </pre>
<b>Minimum &amp; maximum scales</b>	1:25.000 – 1:5.000

### 11.2.6 Styles for the layer AF.AgriBuilding

<b>Style Name</b>	<b>AF.AgriBuilding</b>
<b>Default Style</b>	AF.AgriBuilding.Default

<b>Style Title</b>	Agricultural and Aquaculture Agribuilding Default Style
<b>Style Abstract</b>	The geometry is rendered as a circle with a size of 3 pixels, with a Green (#808000) fill and a black outline (#000000).
<b>Symbology</b>	<pre> &lt;sld:NamedLayer&gt;   &lt;se:Name&gt; AF.AgriBuilding.Default&lt;/se:Name&gt;   &lt;sld:UserStyle&gt;     &lt;se:Name&gt;INSPIRE_Default&lt;/se:Name&gt;     &lt;sld:IsDefault&gt;1&lt;/sld:IsDefault&gt;     &lt;se:FeatureTypeStyle version="1.1.0"&gt;       &lt;se:Description&gt;         &lt;se:Title&gt;Agricultural and Aquaculture AgriBuilding Default Style&lt;/se:Title&gt;         &lt;se:Abstract&gt; The geometry is rendered as a circle with a size of 3 pixels, with a Green (#808000) fill and a black outline (#000000)&lt;/se:Abstract&gt;       &lt;/se:Description&gt;       &lt;se:FeatureTypeName&gt;AF.AgriBuilding&lt;/se:FeatureTypeName&gt;       &lt;se:Rule&gt;         &lt;se:PolygonSymbolizer&gt;           &lt;se:Geometry&gt;             &lt;ogc:PropertyName&gt;AgriByuilding.geometry&lt;/ogc:PropertyName&gt;           &lt;/se:Geometry&gt;           &lt;se:Fill/&gt;           &lt;se:Stroke/&gt;         &lt;/se:PolygonSymbolizer&gt;       &lt;/se:Rule&gt;     &lt;/se:FeatureTypeStyle&gt;   &lt;/sld:UserStyle&gt; &lt;/sld:NamedLayer&gt; </pre>
<b>Minimum &amp; maximum scales</b>	1:25.000 – 1:1.000

## 11.3 Other recommended styles

No other Recommended Styles