

4. VIEW PROCESSES, PREVIEW OF DISCOVERED SPATIAL DATA

The concept of preview in ESDI

- “View services making it possible, as a minimum, to display, navigate, zoom in/out, pan, or overlay viewable spatial data sets and to display legend information and any relevant content of metadata.” (Article 11 of the INSPIRE directive)
- Sounds that familiar to you?
 - Sure, same functionality as Google Maps, Mapy.cz,...



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The concept of preview in ESDI

- “Experience in the Member States has shown that it is important, for the successful implementation of an infrastructure for spatial information, that a **minimum number of services be made available to the public free of charge**. Member States should therefore make available, as a minimum and free of charge, the services for **discovering** and, subject to certain specific conditions, **viewing spatial data sets**.” (Paragraph 19)

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The concept of preview in ESDI

- “Data made available through the view services may be in a form preventing their re-use for commercial purposes.” (Article 14)

- Watermark
- Degradation of the image quality
- Even required registration



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INSPIRE View service

- Equals to ISO 19128
 - ISO 19128 equals to OGC Web Map Service 1.3.0
 - Only version 1.3.0!

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Two possibilities of connecting to a view service

1. Through a “thin” client

- typically a Web browser...really like Google Maps



2. Through a “thick” client

- e.g. a map client, typically GIS

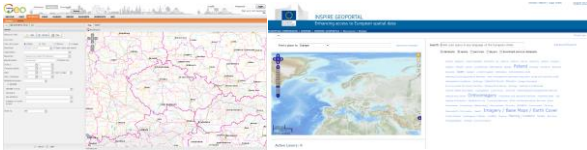


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Legislation background

- Again, all this is originating from INSPIRE legislation (the same as for discovery services)



- COMMISSION REGULATION (EC) No 976/2009 of 19 October 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards the Network Services

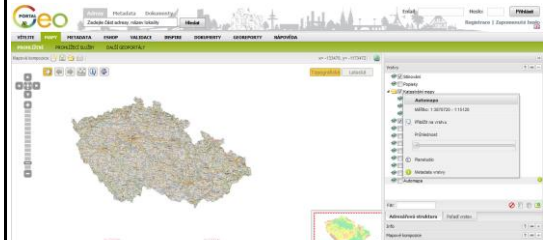
<http://inspire.ec.europa.eu/index.cfm/pageid/5>

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Let's make it simple...a use case with Web browser

- Type in <http://inspire-geoportal.ec.europa.eu/discovery/> or <http://geoportal.gov.cz/web/guest/map/>

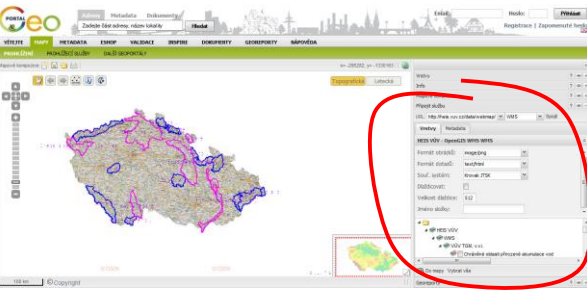


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Legislation background

- Sure, all this is again originating from INSPIRE legislation



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Operations of an INSPIRE view service

- Get View Sel

– i.e. GetCap

- Get Map

– i.e. GetMap

- Link Discover

– an equivalent OGC

Aren't you missing anything?

- Note: OGC GetFeatureInfo is not intended under the INSPIRE standardization framework

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VIEW SERVICES

PART A

Operations

1. LIST OF OPERATIONS

In order to be in conformity with Article 11(1) of Directive 2007/2/EC, the View Service shall provide the operations listed in Table 1 of this Annex.

Table 1

| Operation | Role |
|---------------------------|---|
| Get View Service Metadata | Provides all necessary information about the service and describes service capabilities |
| Get Map | Returns a map containing the geographic and thematic information coming from the available spatial datasets. This map is an image quality optimized |

In order to be in conformity with Article 12 of Directive 2007/2/EC, the view Service shall support the operations listed in Table 2 of this Annex.

Table 2

| Operation | Role |
|-------------------|--|
| Link View Service | Allows a Public Authority or a Third Party to declare a view Service for the viewing of its resources through the Member State View Service while maintaining the viewing capability of the Public Authority or the Third Party location |

The request and response parameters of each operation complete the description of each operation and form an integral part of the View Service technical specification.

Get View Service Metadata

- Intended for "thick" clients
- Not applicable for an ordinary user with a Web browser



| | |
|----------------------|---|
| Title | Hydroecological information system – map server OpenGIS WMS |
| Service type | INSPIRE View Service (WMS – Web Map Service according to the OGC) |
| Service version | 1.3.0 |
| Supported languages | Czech, English |
| Fees | Free of charge |
| Responsible Party | VÚV TGM, v.v.i. |
| E-mail | info@ceniz.cz |
| Supported operations | Get View Service Metadata Get Map Link View service GetFeatureInfo |



catalogue

<http://heis.vuv.cz/data/webmap/isapi.dll?SERVICE=WMS&REQUEST=GetCapabilities>



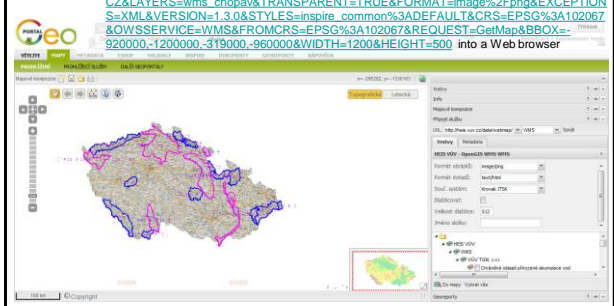
client



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Get Map

- Type http://heis.vuv.cz/data/webmap/isapi.dll?SERVICE=WMS&LANG=CS-CZ&LAYER=wms_chopav&TRANSPARENT=TRUE&FORMAT=image%2Fpng&EXCEPTION_S=XML&VERSION=1.3.0&STYLES=inspire_common%3ADEFAULT&CRS=EPSG%3A102067&QWSSERVICE=WMS&FROMCRS=EPSG%3A102067&REQUEST=GetMap&BBOX=-920000,-1200000,-319000,-960000&WIDTH=1200&HEIGHT=500 into a Web browser



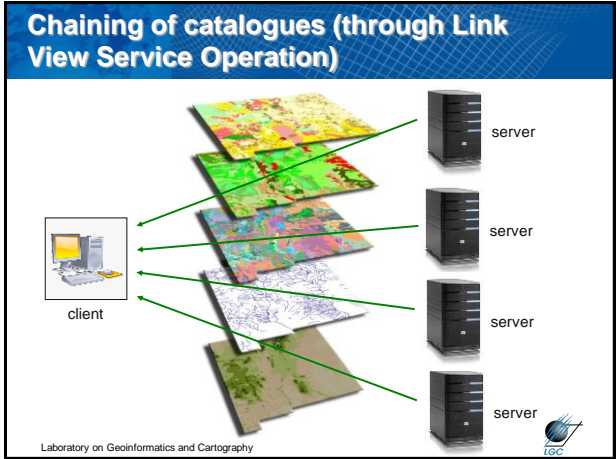
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Thick client – a GIS platform

The screenshot shows a GIS application window with a map of a rural area. A 'Layers' window is open, displaying a list of layers with columns for Name, Type, and Status. The layers include various data sources like 'C:\GIS\DATA\...' and 'C:\GIS\PROJECTS\...'. The application title bar reads 'QGIS 2.2.0 - Internet - QGIS_Example'.

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Quality of service

- Again defined in legislation
- For a **470 Kilobytes image** (e.g. 800 × 600 pixels with a colour depth of 8 bits), the response time for sending the initial **response to a Get Map Request** to a view service shall be **maximum 5 seconds** in normal situation. Normal situation represents periods out of peak load. It is set at 90 % of the time.
- The **minimum number of served simultaneous requests** to a view service according to the performance quality of service shall be **20 per second**.
- The probability of a Network Service **to be available** shall be **99 % of the time**.

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Quality of service...still the same

| Uptime [%] | Maximum downtime | | |
|------------|------------------|-------------|------------|
| | Per week | Per month | Per year |
| 95 | 8.4 hours | 36.00 hours | 18.25 days |
| 99 | 3.4 hours | 14.40 hours | 7.30 days |
| 99.9 | 1.7 hours | 7.27 hours | 3.63 days |
| 99.9 | 10 minutes | 0.73 hours | 8.76 hours |

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