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,…

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)

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

INSPIRE View service

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

Two possibilities of connecting to a view service

1. **Through a "thin" client**
   – typically a Web browser…really like Google Maps

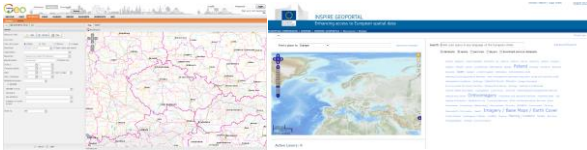2. **Through a "thick" client**
   – e.g. a map client, typically GIS

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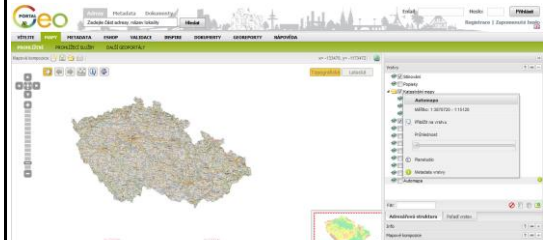- http://inspire.ec.europa.eu/index.cfm/pageid/5

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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/
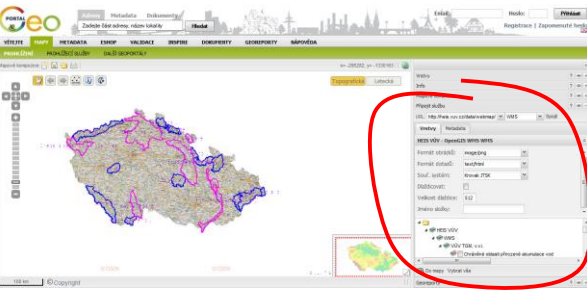

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Legislation background

- Sure, all this is again originating from INSPIRE legislation

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Operations of an INSPIRE view service

- **Get View Service Metadata**
  – i.e. GetCapabilities
- **Get Map**
  – i.e. GetMap
- **Link Discovery Service**
  – an equivalent of OGC Link View Service

Aren't you missing anything?

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

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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@cenia.cz
Supported operations	Get View Service Metadata
	Get Map
	Link View service
	GetFeatureInfo

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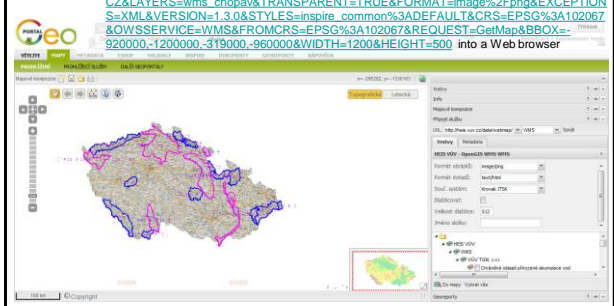
catalogue   client

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Get Map

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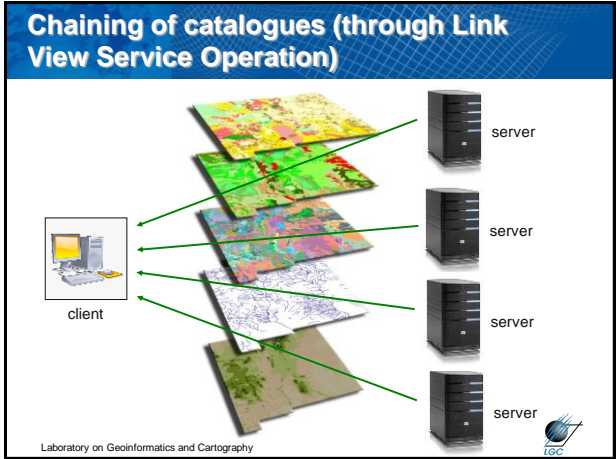

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2

Thick client – a GIS platform

Chaining of catalogues (through Link View Service Operation)

server

server

client

server

server

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**.

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
98	3.4 hours	14.40 hours	7.30 days
99	1.7 hours	7.27 hours	3.63 days
99.9	10 minutes	0.73 hours	8.76 hours