

INSPIRE Conference

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Harmonisation of Spatial Planning Data

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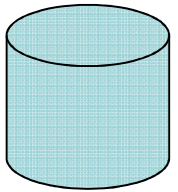
Pilsen, Czech Republic



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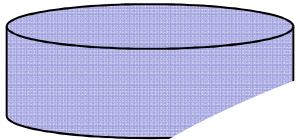
Spatial Planning



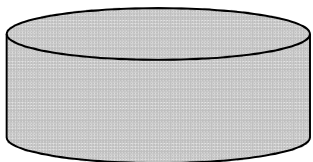
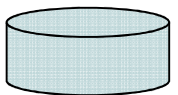
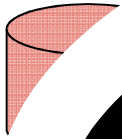
protected sites

agriculture

land use



zones



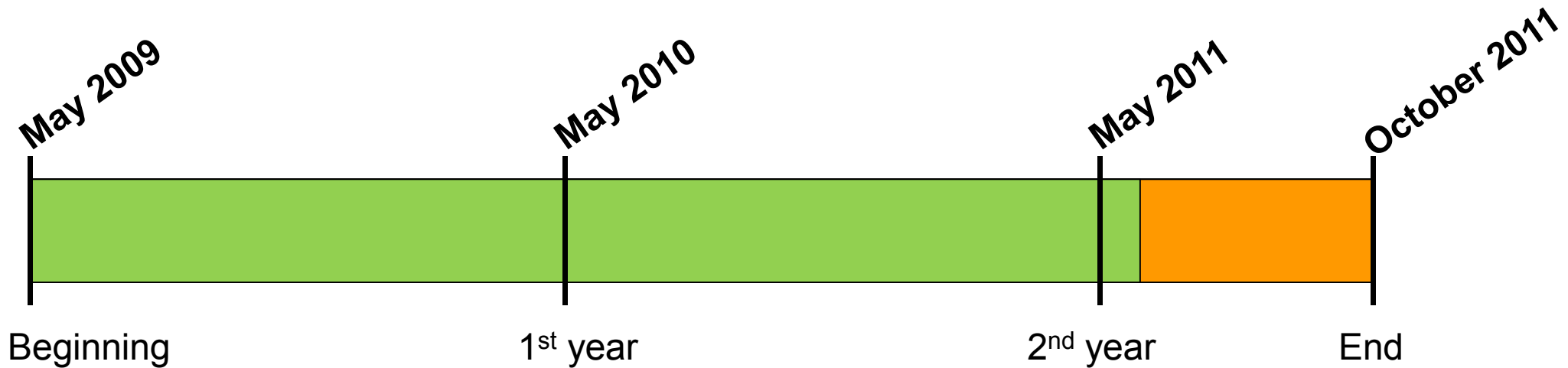
INTEROPERABILITY

hydrology

industry

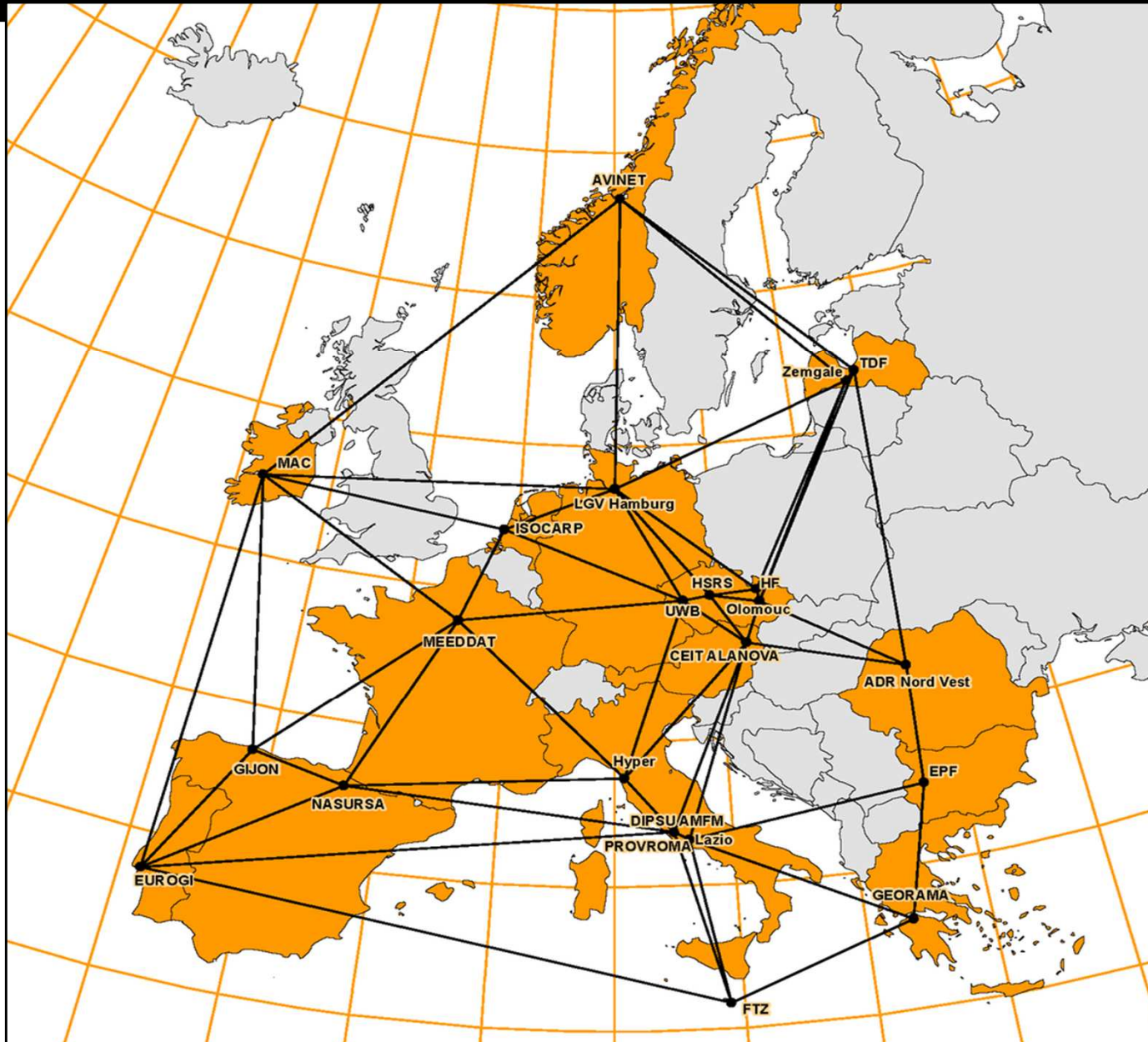
restriction zones

Plan4all - Main Goal



Harmonisation (on European level) of spatial planning data according to the INSPIRE Directive.

Plan4all Consortium



INSPIRE Spatial Data Themes

Annex I

- Coordinate reference system
- Geographical grid systems
- Geographical names
- Administrative units
- Addresses
- Cadastral parcels
- Transport networks
- Hydrography
- Protected sites

Annex II

- Elevation
- Land cover
- Orthoimagery
- Geology

Plan4all

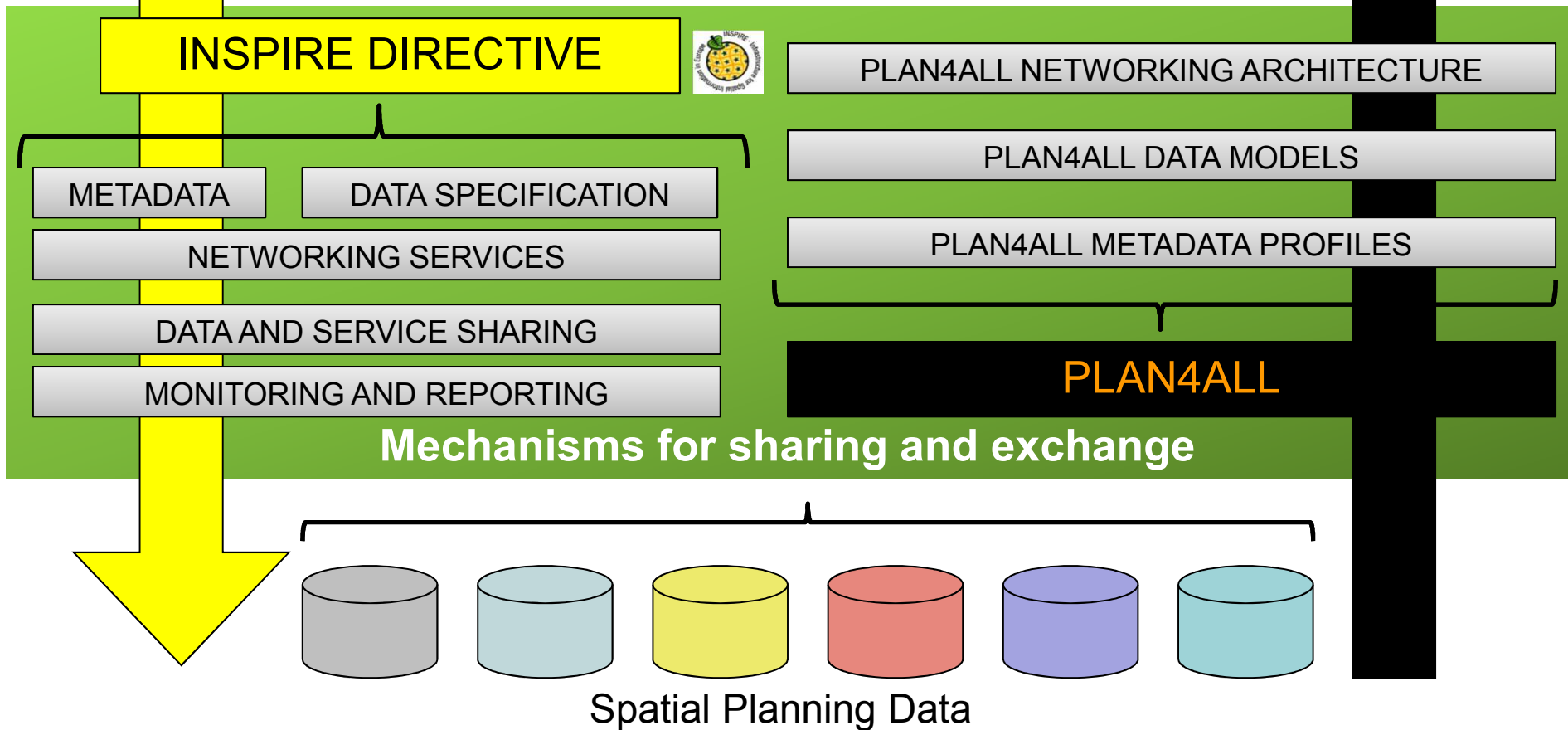
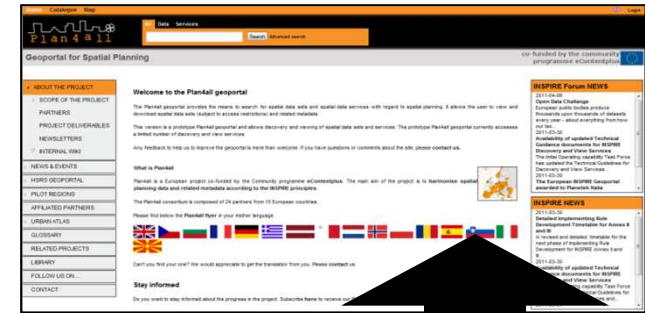
Annex III

- Statistical units
- Buildings
- Soil
- Land use
- Human health and safety
- Utility and Government services
- Environmental monitoring facilities
- Production and industrial facilities
- Agricultural and aquaculture facilities
- Population distribution – demography
- Area management/restriction/regulation zones and reporting units
- Natural risk zones
- Atmospheric conditions
- Meteorological geographical features
- Oceanographic geographical features
- Sea regions
- Bio-geographical regions
- Habitats and biotopes
- Species distribution
- Energy resources
- Mineral resources

Case study



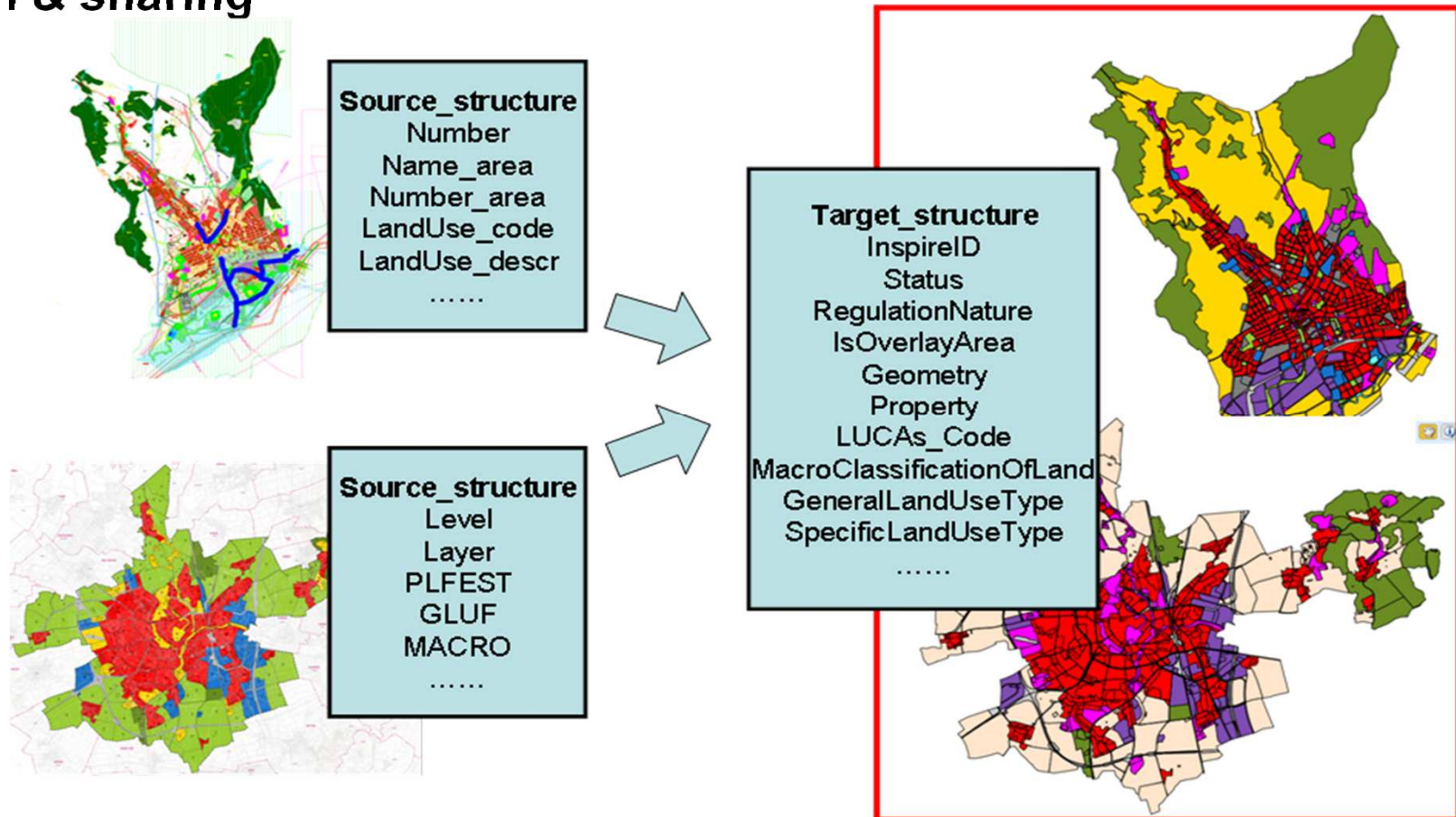
Seamless access to data



Data harmonisation

Four steps:

1. Preparation of the source data (GIS structure)
2. Description of the source data structure
3. Data structure transformation
4. **Publication & sharing**



Geoportal



Establish European portal for spatial planning data

The Plan4all Geoportal is available at:

<http://www.plan4all.eu/>

- OGC Web Services
- Metadata Catalogue
- Map Client

The screenshot shows the Plan4all Geoportal website. The header includes navigation links for Home, Catalogue, and Map, along with a search bar and a 'Data Services' tab. The main content area is titled 'Geoportal for Spatial Planning' and features a 'Welcome to the Plan4all geoportal' section. This section provides information about the portal's purpose, its status as a prototype, and contact details for feedback. Below this, there is a 'What is Plan4all' section explaining the project's goal to harmonize spatial planning data and metadata according to INSPIRE principles. A row of flags represents the 24 partner countries. The 'Stay informed' section encourages users to subscribe to the newsletter. On the right side, there are two news sections: 'INSPIRE Forum NEWS' and 'INSPIRE NEWS', both containing recent updates and dates.

Software interfaces

To achieve interoperability the main software interface between each particular component have to be based on ISO standards and OGC specifications following the INSPIRE Directive.

These specifications are:

- OGC CSW
- OGC WFS
- OGC WMS
- OGC WPS

Other relevant standards are:

- ISO 19115
- ISO 19110
- Metadata Dublin Core

Recommendations

Services	Recommendations
Discovery	To implement specification for CSW 2.0.2 and CSW 2.0.2 AP ISO
	To implement CSW protocol harvesting verbs
	To define Pla4all metadata profile
	Support of INSPIRE and OGC AP ISO queriables
	Support of Plan4All queriables defined in D3.2
	To include previews of contents functionality
View	To use Coordinate Reference Systems (CRS) defined by INSPIRE
	To allow SLD profile capability for WMS
	To implement GetFeatureInfo operation support with allowed formats: GML, text
	Where ever applicable, to implement WMS time-scale support
	To include datased Identier, metadataURL and dataURL into layer metadata

Recommendations

Services	Recommendations
Download	To implement the most recent versions of WFS and GML
	To implement the support for SOAP envelope
	To allow complex models embedding
	Paging support
Invoke	To implement OGC WPS 1.0.0 or later
	To describe optional parameters for data inputs, outputs and the processes themselves

Current status

20 partners are sharing metadata using OGC Catalogue Services for the Web

20 partners are sharing data using OGC Web Map Services

Most of the partners are sharing data using OGC Web Feature Services

CSW, WMS, WFS

Partner	CSW	WMS, WFS
Olomouc	http://metammo.smartgis.cz/	http://vm-glog.wirelessinfo.cz/glog/glog/entry.php?class=Mapman.MapmanWms&mapProject=mapproject85&instance=&SERVICE=WMS&REQUEST=GetCapabilities
TDF	http://geoportal.tdf.lv/catalogue/	http://geoportal.tdf.lv/glog/Glog/entry.php?class=Mapman.MapmanWfs&VERSION=1.0.0&mapProject=mapproject20&instance=&SERVICE=WFS&REQUEST=GetCapabilities
HSRS	http://portal.plan4all.eu/metadata/?lang=eng	
LGV Hamburg	http://www.kst.portalu.de/ingrid/index.html	http://gateway.hamburg.de/OGCFassade/BSU_WMS_LAPRO.aspx?SERVICE=WMS&REQUEST=GetCapabilities
ZPR	http://giz.zpr.gov.lv/catalogue/	http://giz.zpr.gov.lv/catalogue/libs/cswclient/cswClientRun.php?serviceName=ZPR&format=application/xml&id=DCAD7E1F-7A1B-053F-34D8-7A541FD0D331
NASURSA	http://idena.navarra.es/busquedas/catalog/main/home.page	http://idena.navarra.es/ogc/wms.aspx
PROVROMA	http://plan4all.hyperborea.com/geonetwork/srv/en/csw?REQUEST=GetCapabilities&SERVICE=CSW&ACCEPTVERSION=2.0.0,0.7.2&outputFormat=application/xml	http://plan4all.hyperborea.com/geoserver/ows?service=wms&version=1.1.1&request=GetCapabilities
GIJON	http://ide.gijon.es:8080/geonetwork/srv/en/csw?REQUEST=GetCapabilities&SERVICE=CSW&ACCEPTVERSION=2.0.0,0.7.2&outputFormat=application/xml	http://ide.gijon.es:8080/geoserver/wfs?Request=GetCapabilities

Thank you for you attention

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PROVINCIA DI ROMA



NORTH-WEST REGIONAL DEVELOPMENT AGENCY



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Institute of Urbanism,
Transport, Environment
and Information Society



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Euro Perspectives Foundation

<http://www.plan4all.eu>