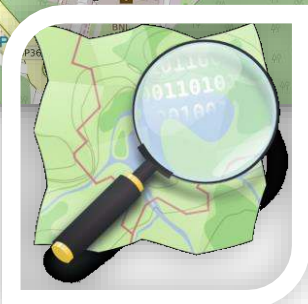
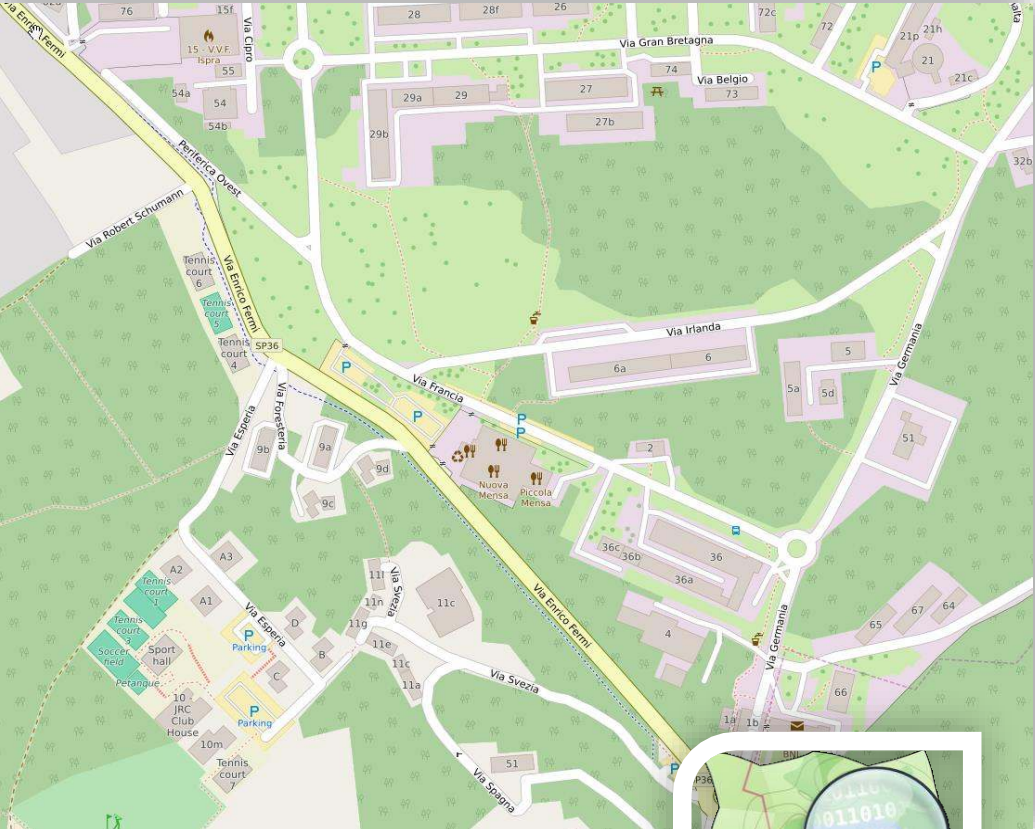
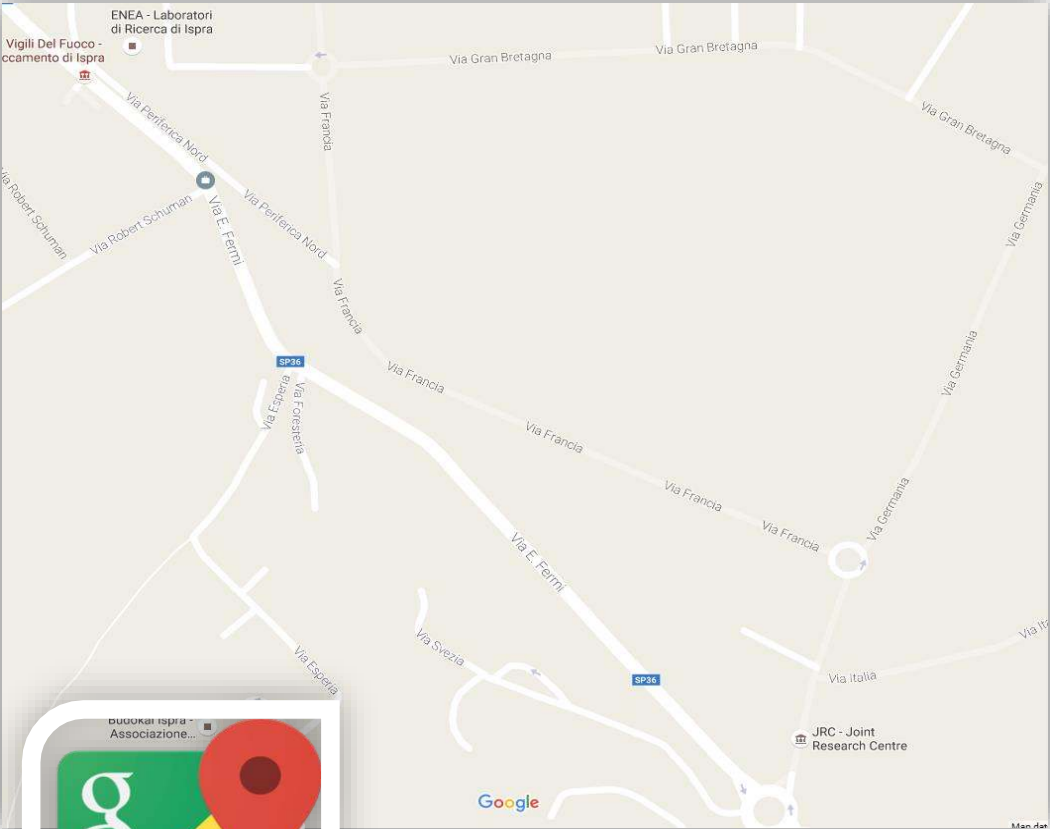


OSM and the European agenda

Vlado Ceti, Alexander Kotsev, Michael Lutz, Robert Tomas (EC DG JRC)*
Hannes Reuter (EC DG ESTAT)*
Emilio López Romero (Instituto Geográfico Nacional, Madrid, Spain)
Francesco Moretti, Massimo Migliorini and Sergio Olivero
(SiTI – Istituto Superiore sui Sistemi Territoriali per l’Innovazione, Torino, Italia)

About JRC



Outline

1. EU developments

- GISCO
- INSPIRE

2. Examples

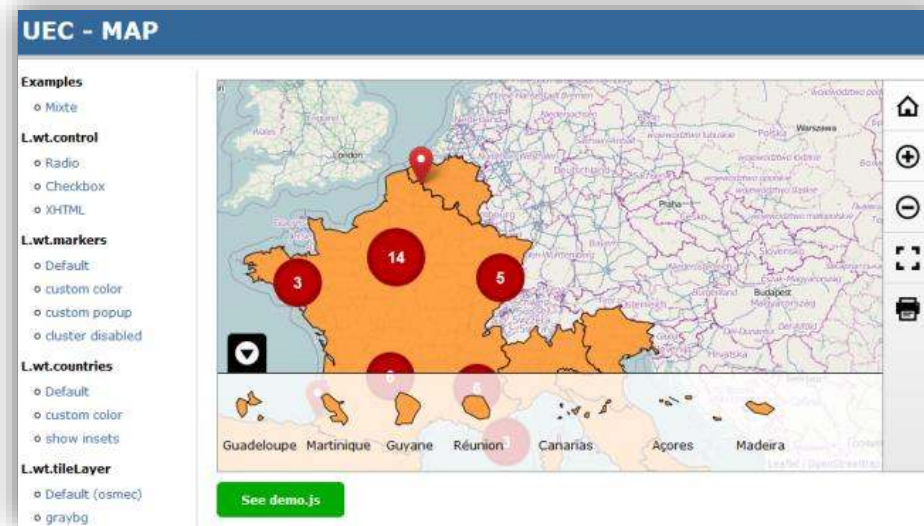
- GISCO - Background Services (OSM@EC)
- INSPIRed OSM in Spain
- Cultural heritage and hazards in the Danube region

GISCO

DG's + Agencies + European Institutions

DG COMM
WEBTOOLS

DG ESTAT (GISCO) & other DGs
DATA & SERVICES & GUIDANCE



Geographic Information System of the Commission (GISCO) Home

Created by Anthony SCHWARTZ, last modified by Hannes REUTER on Feb 09, 2015



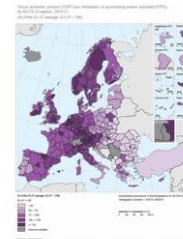
GISCO - the Geographic Information System of the Commission – localise, analyse, visualise

GISCO is a permanent service of Eurostat that answers the needs of Eurostat and the European Commission for geographical information at the level of the European Union (EU), its Member States and regions.

GISCO's main task is to provide reference geographical information and related services for use within Eurostat and the Commission and to the European citizens at large. The GISCO database contains core geographical data for all of Europe such as administrative boundaries, but also thematic geospatial information, for instance population grid data. GISCO also coordinates Commission-wide geographical information activities and common strategies and has the goal to promote and stimulate the use of geographical information and GIS within the European Statistical System and the Commission.

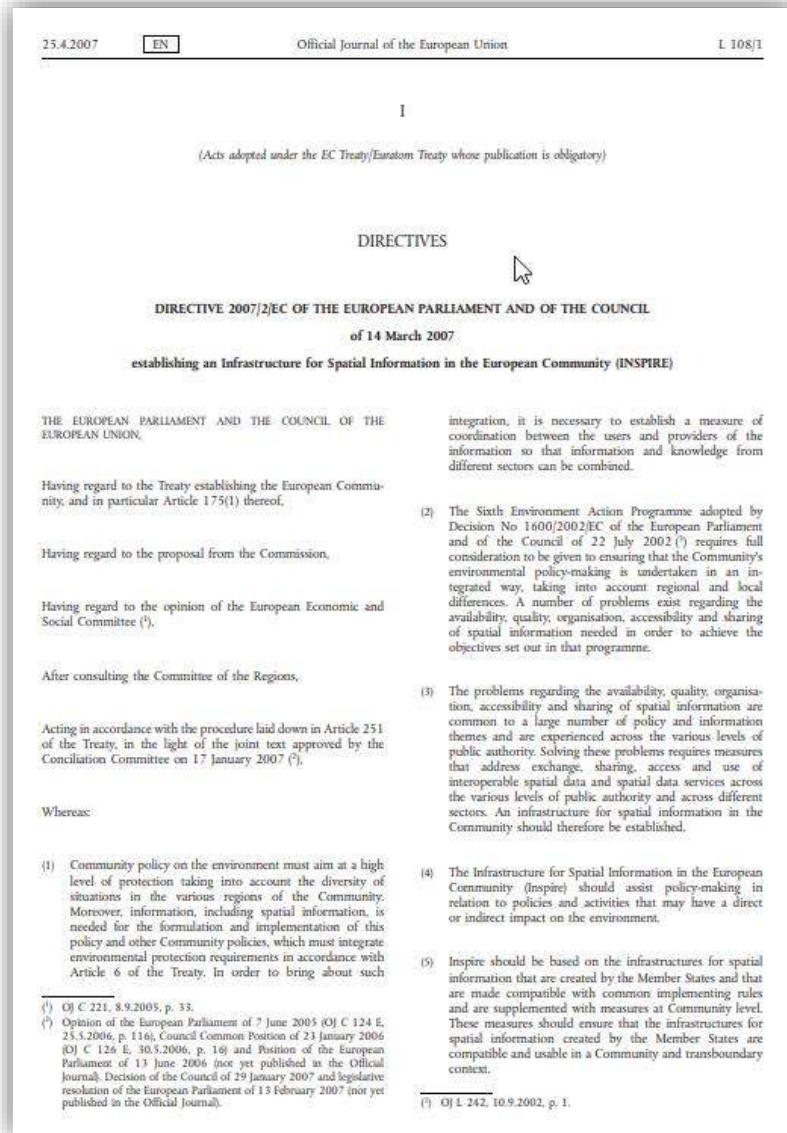
GISCO activities consist of the following pillars:

- management of the geographical reference database of the Commission;
- operation of the spatial data infrastructure of the European Commission;
- data processing, mainly for thematic mapping, spatial analysis, and data dissemination;
- coordination and relationships with users and producers of statistical and geospatial information (Commission, European agencies, statistical offices);
- chair of the GISCO working group of National Statistical Institutes and National Mapping and Cadastral Authorities;
- promoting activities to integrate geographical information with thematic information, notably statistical information;
- active participation in the UN-GGM initiative;
- cooperation in initiatives for the establishment of a geographical information infrastructure at the European level (INSPIRE).



European
Commission

2007: A baby is born



Nokia 2600, 15 million sold

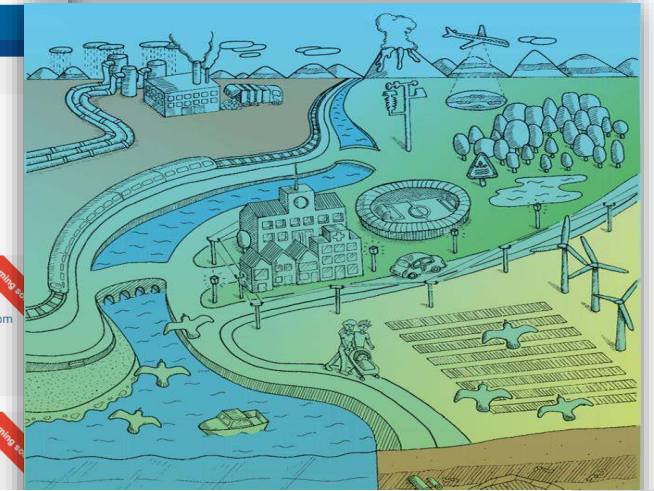
INSPIRE & JRC

- Technical coordination for the implementation of the INSPIRE Directive
- Providing validation tool to test interoperability of data and services
- Providing access to MS data through the INSPIRE Geoportal
- Contribute to availability of priority datasets

The screenshot shows the 'INSPIRE Geoportal Thematic Views' page. The header includes the European Commission logo and the text 'INSPIRE Geoportal Thematic Views'. Below the header, there are navigation links: Home, Priority Datasets, INSPIRE Data Themes, Applied methodology, and Harvesting Status. The main content area is titled 'Priority Datasets' and contains a grid of six categories, each with a 'Coming soon' banner:

- Air & Noise**: Covers ambient air quality and cleaner air for Europe, industrial emissions ...
- Industry**: Covers industrial emissions and industrial accidents.
- Waste**: Landfill of waste, waste from extractive industries, soil, banning of exports of metallic mercury ...
- Nature & Biodiversity**: Covers conservation of natural habitats and wild fauna and flora, wild birds.
- Water**: Water Framework Directives, Urban waste water, bathing water, ...
- Marine**: Covers marine environmental po...

At the bottom, there is a link: 'For more information please visit Main page for the MIWP action 2016.5 "Priority list of datasets for e-Reporting"'



The screenshot shows the 'INSPIRE Geoportal Thematic Viewer' page. The header includes the European Commission logo and the text 'INSPIRE Geoportal Thematic Viewer'. Below the header, there are navigation links: Home, Priority Datasets, INSPIRE Data Themes, Applied methodology, Harvesting Status, Only National Coverage, and a toggle switch for 'OFF'. The main content area is titled 'Datasets - Addresses of Europe'.

The screenshot shows the 'INSPIRE Geoportal Datasets - Addresses of Europe' page. It features a map of Europe with a 'Hover over a member state' tooltip. To the right of the map, there are statistics:

- INSPIRE Geoportal Dataset Statistics: 2042 Metadata records, 39 Downloadable Datasets.
- INSPIRE Monitoring & Reporting 2016 (status 2016): 532 Metadata records.
- Download Report button.

Below the map, there is a 'Select a COUNTRY' section with a grid of country flags and their corresponding dataset counts:

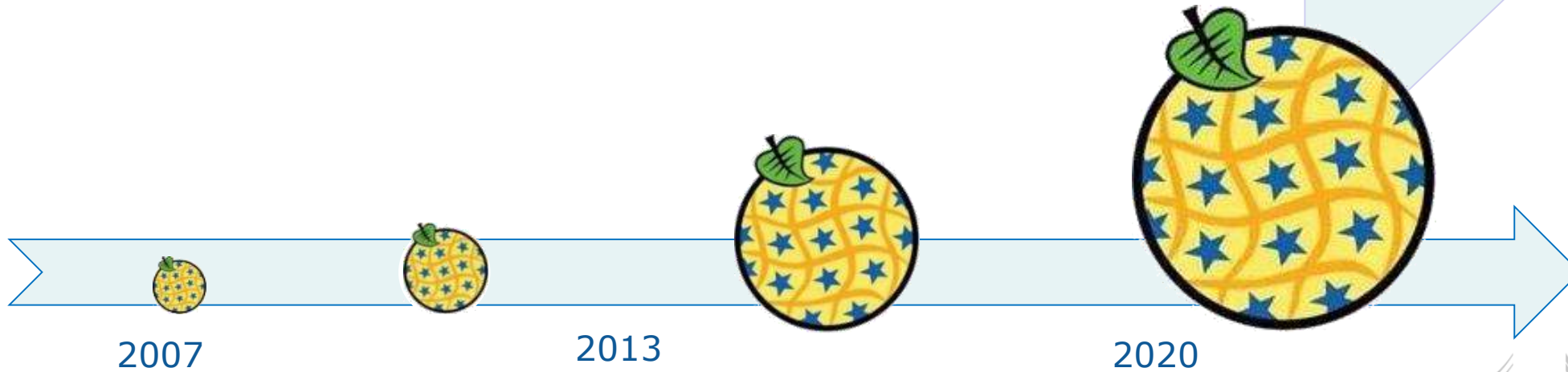
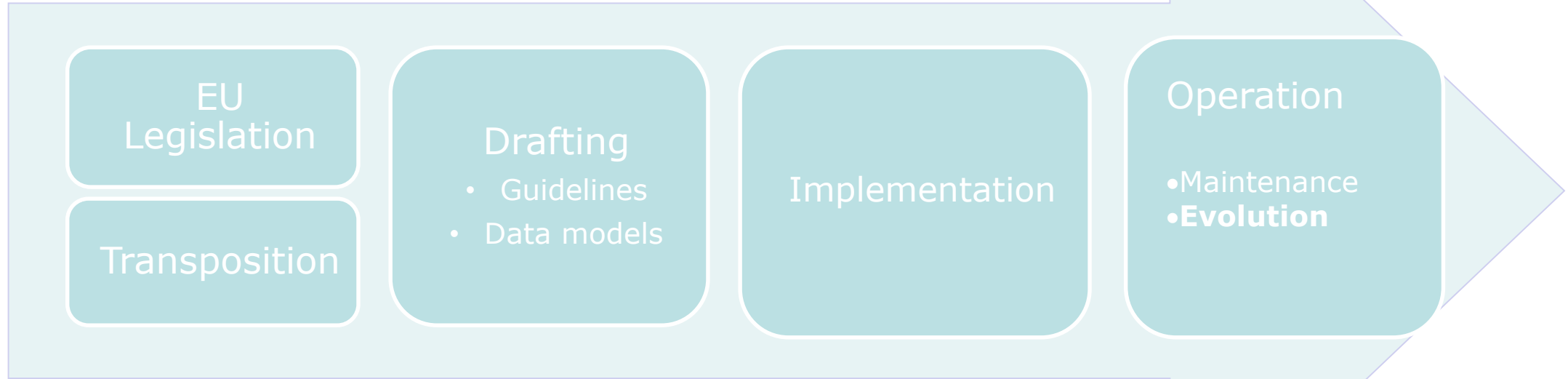
Country	Dataset Count
Algeria	2 0 0 0
Andorra	0 0 0 0
Austria	1 1 1 1
Belgium	2 2 2 9
Bulgaria	0 0 0 0
Croatia	4 0 0 0
Cyprus	1 1 1 1
Czech Republic	1 1 0 0
Denmark	1 1 0 0
Estonia	1 1 1 1
Finland	7 1 0 0
France	115 1 2 0
Germany	24 1 11 8
Greece	0 1 0 0
Hungary	0 0 0 0
Ireland	0 1 0 0
Italy	17 1 45 0
Latvia	1 1 0 0
Liechtenstein	1 1 0 0
Lithuania	2 1 0 0
Luxembourg	1 1 0 1
Malta	0 0 0 0
Netherlands	2 1 0 2
Norway	0 1 0 0
Poland	1756 1 52 5
Portugal	6 1 0 0
Romania	1 1 0 0
Slovakia	1 1 0 0
Slovenia	1 1 0 1
Spain	3 1 4 0
Sweden	1 1 0 0
Switzerland	3 1 0 0
United Kingdom	1 1 0 0

The screenshot shows the 'INSPIRE Geoportal Thematic Views' page. The header includes the European Commission logo and the text 'INSPIRE Geoportal Thematic Views'. Below the header, there are navigation links: Home, Priority Datasets, INSPIRE Data Themes, Applied methodology, Harvesting Status, Only National Coverage, and a toggle switch for 'OFF'. The main content area is titled 'Datasets - Addresses of Europe'.

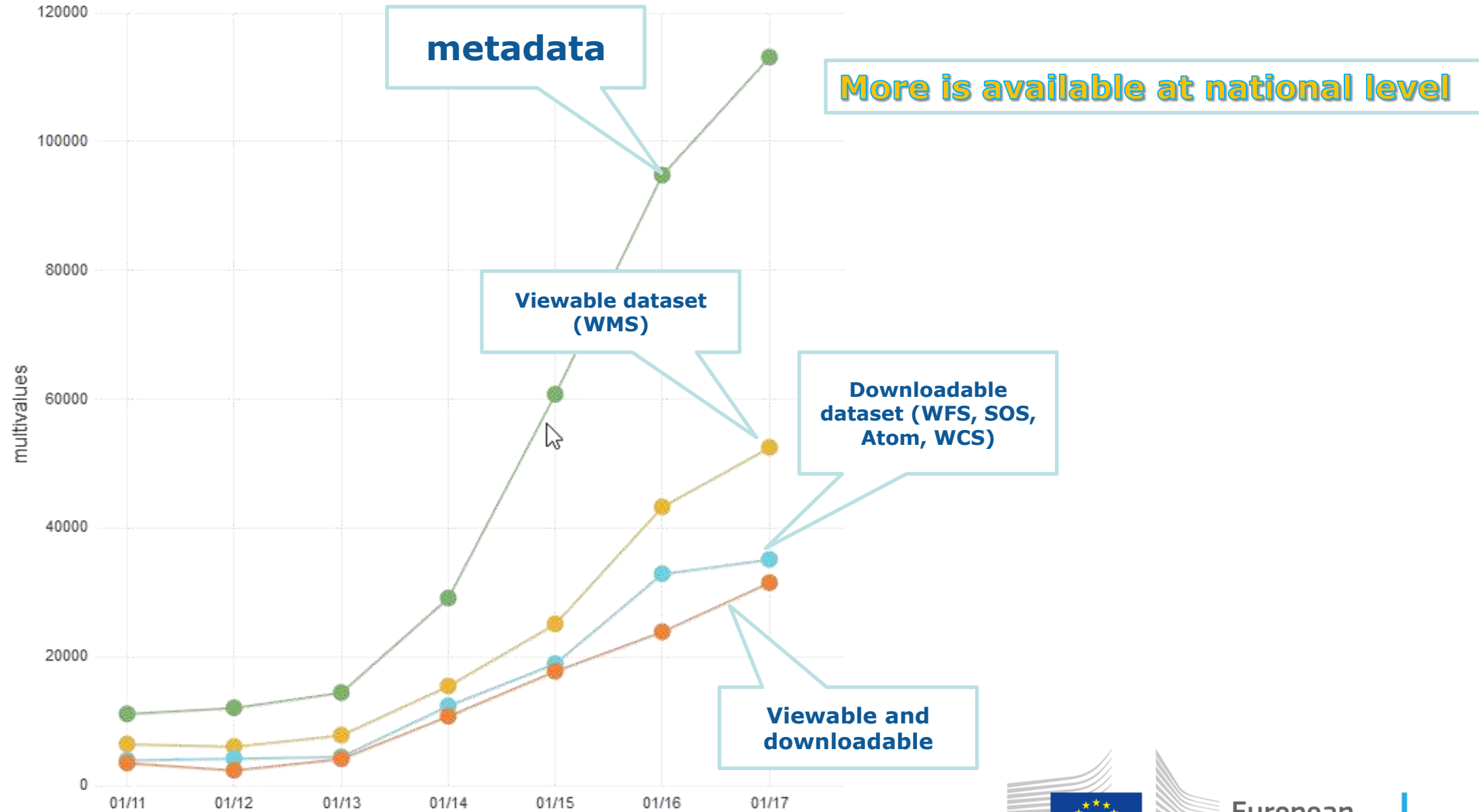
Below the map, there is a 'Select a COUNTRY' section with a grid of country flags and their corresponding dataset counts:

Country	Dataset Count
Algeria	2 0 0 0
Andorra	0 0 0 0
Austria	1 1 1 1
Belgium	2 2 2 9
Bulgaria	0 0 0 0
Croatia	4 0 0 0
Cyprus	1 1 1 1
Czech Republic	1 1 0 0
Denmark	1 1 0 0
Estonia	1 1 1 1
Finland	7 1 0 0
France	115 1 2 0
Germany	24 1 11 8
Greece	0 1 0 0
Hungary	0 0 0 0
Ireland	0 1 0 0
Italy	17 1 45 0
Latvia	1 1 0 0
Liechtenstein	1 1 0 0
Lithuania	2 1 0 0
Luxembourg	1 1 0 1
Malta	0 0 0 0
Netherlands	2 1 0 2
Norway	0 1 0 0
Poland	1756 1 52 5
Portugal	6 1 0 0
Romania	1 1 0 0
Slovakia	1 1 0 0
Slovenia	1 1 0 1
Spain	3 1 4 0
Sweden	1 1 0 0
Switzerland	3 1 0 0
United Kingdom	1 1 0 0

2007 - 2018



2018: Implementation 'state-of-play'



Source: EEA INSPIRE Dashboard

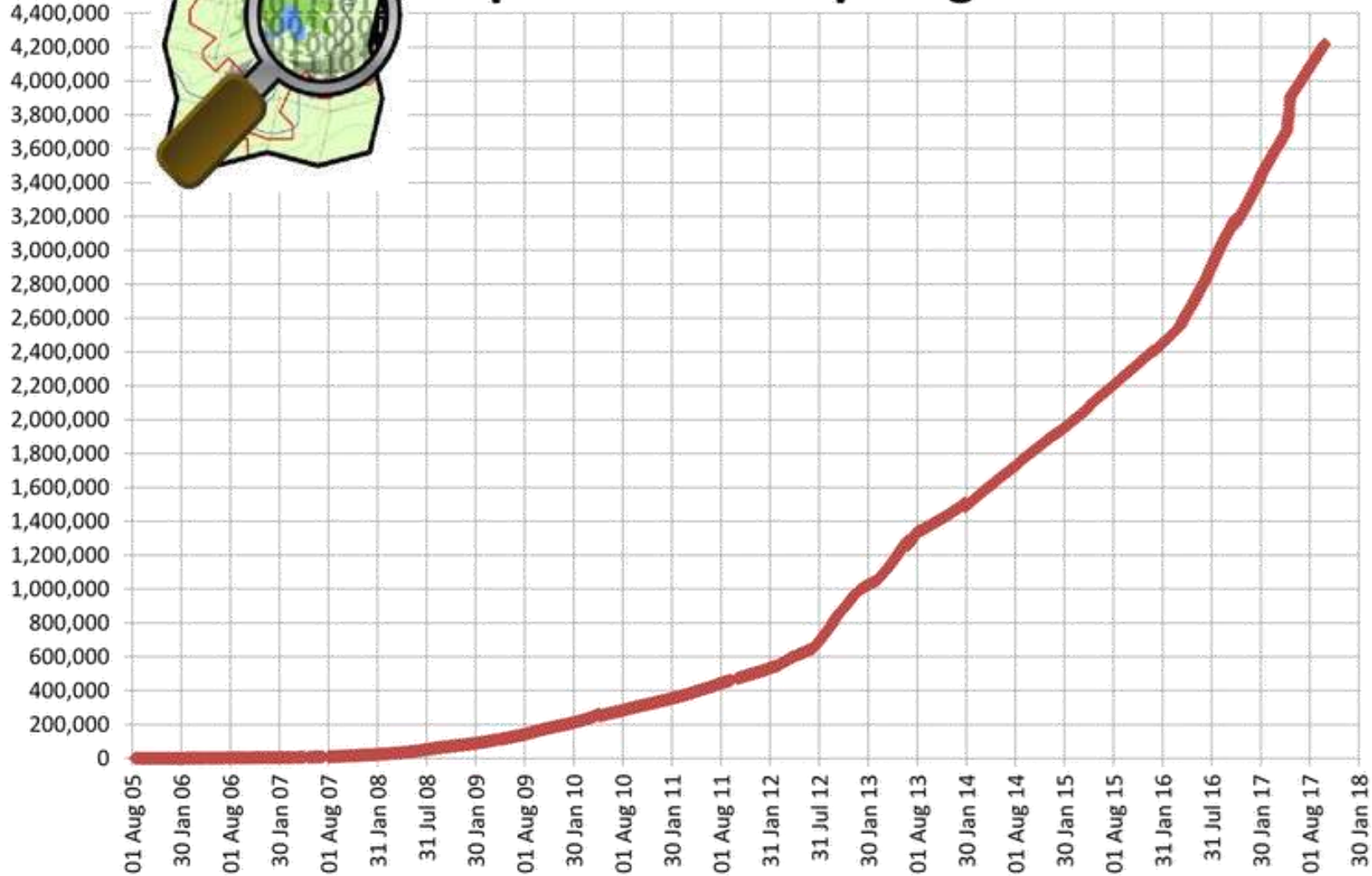


European
Commission

2007 - 2018



OpenStreetMap Registered Users



A few examples

GISCO - Background Services (OSM@EC)



Customised OSM
background maps

In line with the official
position of the EU

Global extent, 5min
update

Up to zoom level 18
(1:2000)

WEBTOOLS or Direct
Usage



European
Commission

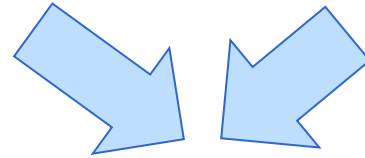
Mapping of disputed areas

Open Street Map

truth on the ground rule

European Commission

political position



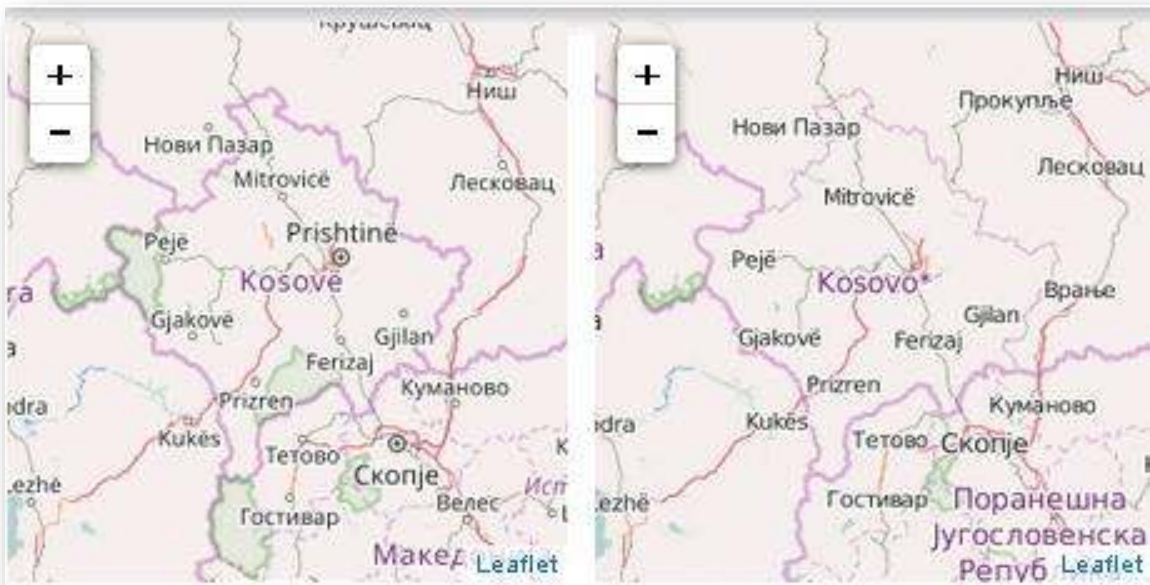
Solution for **OSM@EC**

maintain administrative status of boundaries

- ✓ international
- ✓ disputed
- ✓ line of control
- ✓ kosovo (special case)

MAPPING OF DISPUTED AREAS: EXAMPLES

Kosovo and Macedonia



Crimea

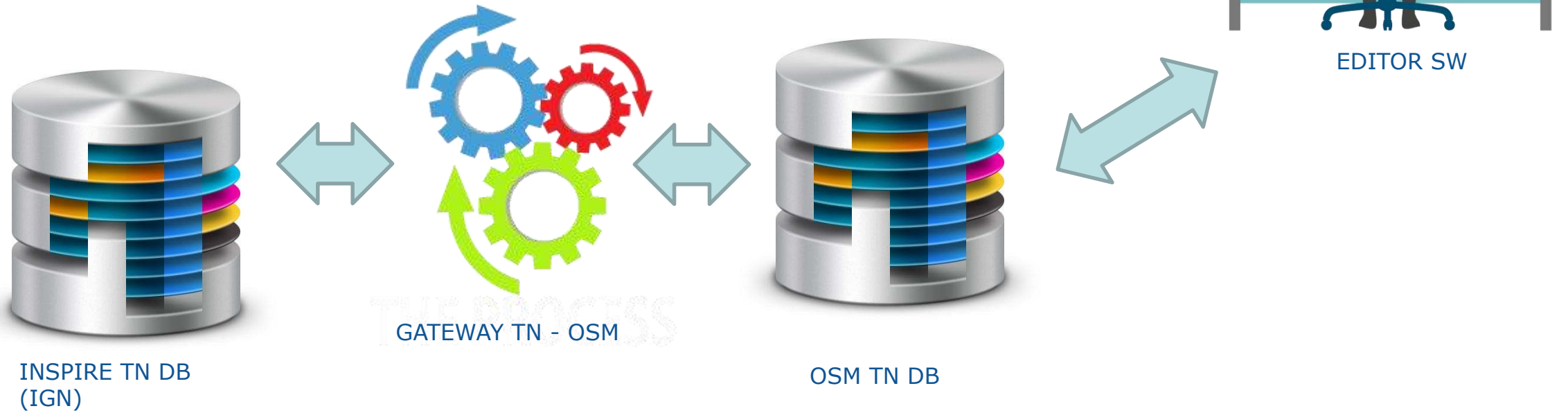


For illustration only "The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the European Union!"

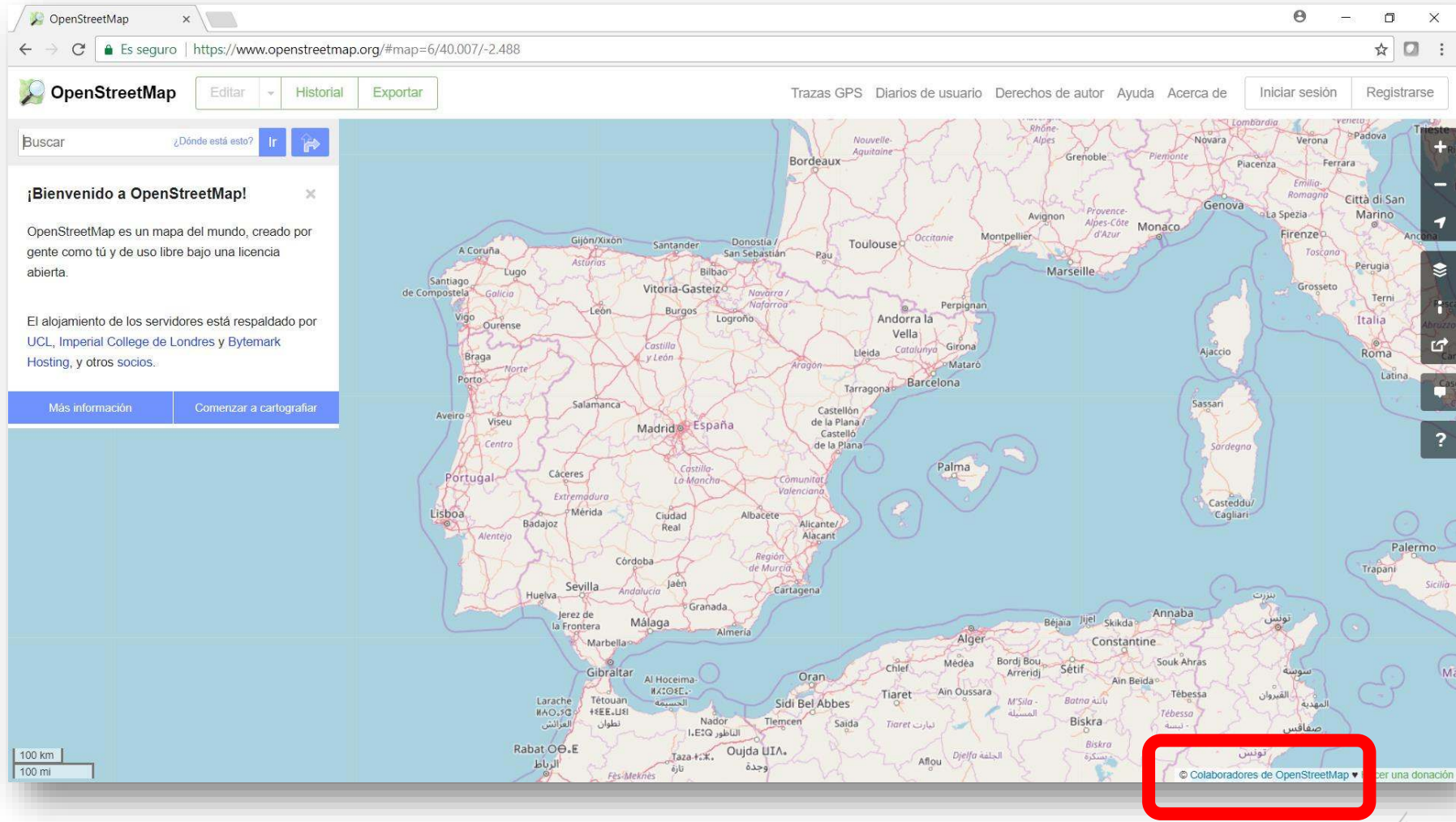


European
Commission

INSPIRed OSM in Spain



INSPIRed OSM in Spain



INSPIRed OSM in Spain

Contributors - OpenStreetMap

https://wiki.openstreetmap.org/wiki/Contributors#Instituto_Geogr.C3.A1fico_Nacional_28IGN.29

Slovenia

Republic of Slovenia, Ministry of Agriculture, Forestry and Food

Actual land use data (*Evidenca dejanske rabe kmetijskih zemljišč*) from [Ministry of Agriculture, Forestry and Food](#) - for details see [Slovenia Landcover Import - RABA-KGZ](#), tagged with `source=RABA-KGZ`

Note: Due to ongoing changes the imported land use data might not always represent the current (on the ground) or official land use (official in Slovene: *"Evidenca dejanske rabe kmetijskih in gozdnih zemljišč se sprotno posodablja, glede na dostopnost virov in informacij. Prikazano stanje ne odraža vedno trenutnega stanja"*)

The Surveying and Mapping Authority of the Republic of Slovenia

Administrative borders of Slovenia (country border, statistical regions...), from [Geodetska uprava Republike Slovenije](#), tagged with `source=GURS`

Note: Public information of Slovenia, The Surveying and Mapping Authority of the Republic of Slovenia (official in Slovene: *"Javne informacije Slovenije, Geodetska uprava Republike Slovenije"*)

Spain

Instituto Geográfico Nacional (IGN)

IGN is providing to OpenStreetmap several valuable resources:

- The official imagery (PNOA) is allowed to be used for tracing. [Details](#)
- Municipality boundaries, geodetic and elevation points and place names where imported. [Details](#)
- CORINE Land Cover. [Details](#)
- [Infraestructura de Datos Espaciales de España \(IDEE\)](#), Centro Nacional de Información Geográfica, Instituto Geográfico Nacional

Catastro de España

Catastro de España (Dirección General del Catastro, del Ministerio de Economía y Hacienda del Reino de España) provides information about buildings and other features under an Open Data license. See: https://wiki.openstreetmap.org/wiki/ES:Spanish_Cadastre

Zaragoza City Council

Data from [Zaragoza Open Data](#) under next terms (this is a free translation, you can read [original terms in spanish](#)):

- It is prohibited to detract the meaning of information.
- Source must be quoted in the documents of reuse. This quote can be made this way: "source=Zaragoza City Council (or proper administrative office)".
- Date of last update must be quoted if available in the original datasource.
- It is prohibited to suggest that Zaragoza City Council participates, sponsors or supports the reuse which is carried out with the information.
- Included metadata about date of update and reuse terms must be included in destination document. They can't be modified or deleted.

Barcelona City Council (CartoBCN)

ES:Fuentes de datos potenciales de España/WMS Nacional

ES: Fuentes de datos potenciales de España (Redirigido desde «Spain Potential Datasources/WMS Nacional»)

Idiomas disponibles — Potential data sources from Spain/National WMS

- español

Otros idiomas — Ayúdanos a traducir esta wiki

WMS de ámbito nacional

Available WMS for whole Spanish territory

Nombre Name	Etiquetado Tagged	TIPO Type	LICENCIA License	Extensión Range	Aprobado Approved	WMS Link servicio link	WMS Link capa Layer link	Observaciones Comments
IDEE/PNOA (Ver Observaciones) (See Comments)	source=PNOA source:date=yyyy	Foto aérea	Libre Orden Ministerial FOM/2807/2015	España Spain	Si	[1]	[2]	El valor de source:date debe ser el de la fecha cuando se tomó la foto, para averiguarlo, usar la información de la página oficial del PNOA El servicio WMS proporciona una capa mosaico con las fechas de los vuelos. Esta se puede cargar en JOSM y saber en cada momento la fecha de la imagen.
Catastro	source=catastro	Catastral		España Spain	Si	[3]	[4]	

Categorías: ES:Fuentes de datos de España | ES:Servidores WMS

Se editó esta página por última vez el 28 dic 2017 a las 11:26

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[Política de privacidad](#) [Acerca de OpenStreetMap Wiki](#) [Exoneraciones](#) [Versión para móviles](#)

Cultural heritage and hazards in the Danube region

Natural Hazards
Fires
Earthquakes
Floodings

DATA SOURCES



Cultural Heritage
Buildings
Sites
Monuments

DATA SOURCES



Cultural heritage and hazards in the Danube region

Data on Cultural Heritage are hosted on OSM in many different categories, such as:

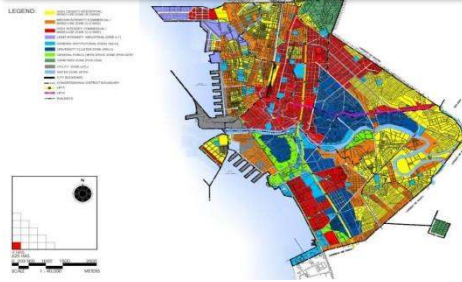
Building



Transport



Land-use



Waterways

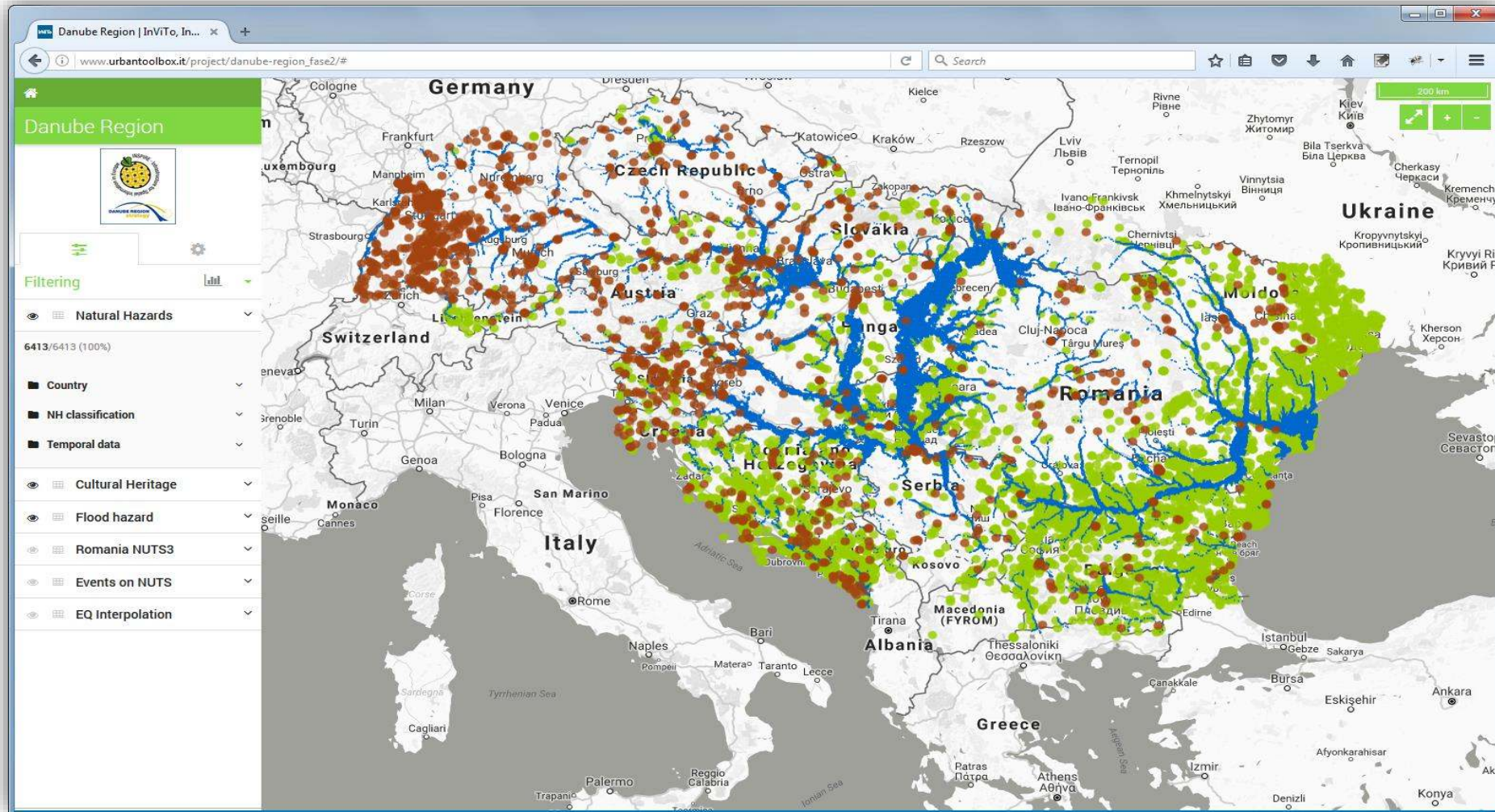


As an example, in the "Building" category data on CH are stored as follows:

	id	geom	osm_id	code	fclass	name	type
	[PK] serial	geometry(MultiPolygon,4326)	character varying(10)	integer	character varying(20)	character varying(100)	character varying(20)
1	1	0106000020E61000000100000001030000000100	8035487	1500	building	Castel Sant' Angelo	
2	2	0106000020E61000000100000001030000000100	1111433	1500	building		
3	3	0106000020E61000000100000001030000000100	11116333	1500	building	Porta Pia	
4	4	0106000020E61000000100000001030000000100	11120487	1500	building	Cattedrale di San Ciriaco	
5	5	0106000020E61000000100000001030000000100	11566050	1500	building	Facoltà di Ingegneria - Edificio 4	
6	6	0106000020E61000000100000001030000000100	14805243	1500	building	Santuario della Santa Casa	basilica
7	7	0106000020E61000000100000001030000000100	20292858	1500	building	Centro dei Borghi	
8	8	0106000020E61000000100000001030000000100	22720153	1500	building	Duomo di Arezzo	
9	9	0106000020E61000000100000001030000000100	22720800	1500	building	Badia delle Sante Flora e Lucilla	church
10	10	0106000020E61000000100000001030000000100	22781491	1500	building	Rocca Roveresca	
11	11	0106000020E61000000100000001030000000100	22929064	1500	building	Scuola Elementare	
12	12	0106000020E61000000100000001030000000100	22945162	1500	building	Battistero di San Giovanni	
13	13	0106000020E61000000100000001030000000100	22991105	1500	building	Palasport Evangelisti	
14	14	0106000020E61000000100000001030000000100	22993409	1500	building	Aeroporto Galileo Galilei	
15	15	0106000020E61000000100000001030000000100	23035987	1500	building	Mercato Talenti	
16	16	0106000020E61000000100000001030000000100	23104361	1500	building	Palazzetto dello Sport	
17	17	0106000020E61000000100000001030000000100	23104367	1500	building	Eido Diagnostica	
18	18	0106000020E61000000100000001030000000100	23104370	1500	building	Piscina Comunale Mussi Lombardi Femiano	
19	19	0106000020E61000000100000001030000000100	23121576	1500	building	Regione Marche Palazzo Leopardi	
20	20	0106000020E61000000100000001030000000200	11877	1500	building	Mole Vanvitelliana	
21	21	0106000020E61000000100000001030000000100	23177834	1500	building	Auchan	
22	22	0106000020E61000000100000001030000000100	2706010	1500	building	Stazione Termini	train_station
23	23	0106000020E61000000100000001030000000100	23276945	1500	building	Stazione Termini	station
24	24	0106000020E61000000100000001030000000100	23276946	1500	building	Roma Termini	train_station
25	25	0106000020E61000000100000001030000000100	23360275	1500	building	Palazzo dell'ENI	office_tower
26	26	0106000020E61000000100000001030000000100	23370510	1500	building	Basilica di San Paolo fuori le mura	basilica

Different types of Cultural Heritage can be found inside "Building" category, such as churches, castles, etc.

Cultural heritage and hazards in the Danube region





.....
www.rescult-project.eu

An international best practice on
Cultural Heritage Protection

The **RESCULT** Project



European
Commission

Cultural heritage and hazards in the Danube region

Strengths

- Data are already catalogued, georeferenced, ready to be downloaded
- Data are constantly updated
- Data are free
- No economic effort is required for database maintenance and update
- Data are easily accessible

Weaknesses

- Data on cultural heritage are spread across different categories (such as "Building").
- Data are often not coherent with Cultural Heritage international standards (such as UNESCO) nor national (such as SIGEC in Italy, JOCONDE in France, etc.).
- No verification/validation process is applied to data, that consequently cannot be used by Emergency Operators or Local Authorities to deal with natural hazard risks prevention
- Reported data are not collected, tailored or structured on the basis of Emergency operators needs (low usability)

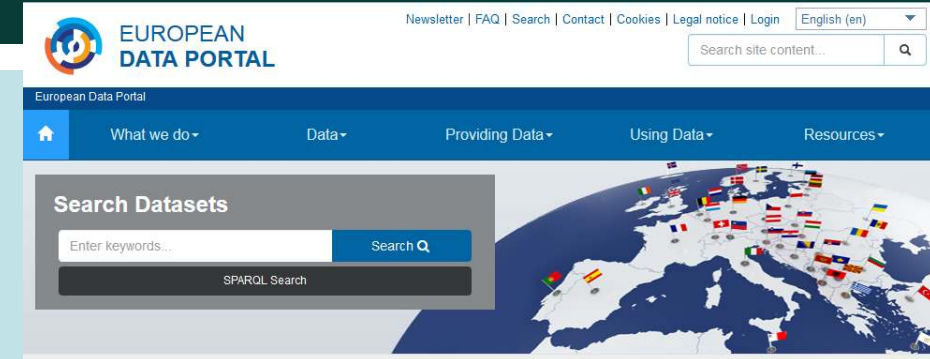
Conclusions

1. OSM, a threat or an opportunity from a public sector point of view?
2. Complementarity (OSM-INSPIRE)

Call CEF-TC-2018-5: Public Open Data

- Objectives

1. Support for the **re-use of information** made discoverable/available through the European Data Portal [2M EUR]
2. Support generation of **cross-border services** providing access to **harmonised thematic open datasets**, in particular geospatial data [1.5M EUR]
3. Support the creation of new access services to increase the HPC and data capacities of the European Data Infrastructure [15M EUR]



Consortium composition: a minimum of 5 entities from 5 or more eligible countries



...

Deadline for submissions: 15 November 2018

<http://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding/2018-cef-telecom-call-public-open-data>

INSPIRE CONFERENCE 2018



#INSPIRE_EU2018

Antwerp
18-21 September



Thanks!



European
Commission