



# MIWP Action 2.4 Central INSPIRE Infrastructure Components

# INSPIRE Geoportals

**JRC INSPIRE Team**

*71<sup>st</sup> MIG-T meeting – October 7<sup>st</sup>, 2022*

# INSPIRE Geoportal Revamp

<https://inspire-geoportal.ec.europa.eu>

Main access point to INSPIRE Infrastructure tools and resources.

- Based on own development.
- Main focus: INSPIRE M&R.
- Being revamped using a GeoNetwork-based backend.

The screenshot shows the INSPIRE Geoportal interface. At the top, there is a navigation bar with the European Commission logo and the text "INSPIRE GEOPORTAL Enhancing access to European spatial data". Below this is a secondary navigation bar with links for Home, Priority Data Sets Viewer, Thematic Viewer, Harvesting status, and Find out more about. The main content area is titled "INSPIRE Data Sets - EU & EFTA Country overview". It features a map of Europe with a "Hover over a country" tooltip. To the right of the map is a "Statistics" panel with three yellow and blue boxes: "84729 Metadata records", "57494 Downloadable Data Sets", and "57704 Viewable Data Sets". Below the map is a "Select a COUNTRY" section with a grid of country names and their respective data set counts. At the bottom right, there is a "Download stats" button.

INSPIRE GEOPORTAL  
Enhancing access to European spatial data

European Commission > INSPIRE > Geoportal

Home | Priority Data Sets Viewer | Thematic Viewer | Harvesting status | Find out more about

### INSPIRE Data Sets - EU & EFTA Country overview

INSPIRE Geoportal Data Set Statistics

- 84729 Metadata records
- 57494 Downloadable Data Sets
- 57704 Viewable Data Sets

Spatial scope:  National coverage:  Regional

#### Select a COUNTRY

Austria	692   461   447	Finland	651   263   238	Latvia	157   99   96	Portugal	503   257   272
Belgium	593   521   525	France	218   75   17	Liechtenstein	70   11   12	Romania	108   38   39
Bulgaria	305   110   103	Germany	71854   53004   53644	Lithuania	132   132   60	Slovakia	257   164   167
Croatia	147   42   95	Greece	45   43   44	Luxembourg	309   288   277	Slovenia	98   48   59
Cyprus	42   32   34	Hungary	121   23   20	Malta	150   145   148	Spain	242   183   186
Czech Republic	91   74   79	Iceland	95   47   0	Netherlands	217   131   135	Sweden	243   191   200
Denmark	202   95   98	Ireland	80   52   51	Norway	161   71   28	Switzerland	218   2   4
Estonia	88   54   59	Italy	6498   755   487	Poland	147   83   80		

Select the whole EUROPE

Download stats

INSPIRE Geoportal Version: 1.6.2

# INSPIRE Geoportal

## Revamp – User interface

### User interface

- **Available** – Filtering by High Value Datasets (HVDs).

To be launched when the Implementing Act on HVDs is entering into force.

- **Almost finished** – Additional developments to integrate the new user interface with the new backend: GeoNetwork.

The screenshot shows the INSPIRE Geoportal homepage. At the top, there is the European Commission logo and the text 'European Commission'. Below this is a navigation bar with the following links: 'European Commission > INSPIRE > INSPIRE Geoportal > HOME'. The main heading is 'INSPIRE GEOPORTAL' with a sub-heading 'ENHANCING ACCESS TO EUROPEAN SPATIAL DATA'. A secondary navigation bar contains links for 'Home', 'High-Value Data Sets', 'Thematic Data', 'Harvesting status', and 'Find out more about'. The main content area is titled 'Welcome to the INSPIRE Geoportal' and contains the following text: 'The INSPIRE Geoportal is the central European access point to the data provided by EU Member States and several EFTA countries under the INSPIRE Directive. The Geoportal allows:'. This is followed by a bulleted list: '• monitoring the availability of INSPIRE data sets;', '• discovering suitable data sets based on their descriptions (metadata);', and '• accessing the selected data sets through their view or download services.'. Below this, it states: 'The metadata used in the Geoportal are regularly harvested from the discovery services of EU Member States and EFTA countries. The status of harvesting is available here.' and 'Feedback regarding the functionality as well as data set availability is welcome here.'. There are two main content blocks: 'High-Value Data Sets' and 'INSPIRE Thematic Data'. Each block features a map with an icon (a color palette for HVDs and an apple for Thematic Data) and a 'Browse' button. At the bottom, there is a section for 'INSPIRE Reference Validator' with a 'Go to INSPIRE Reference Validator' button.

European Commission

EN English

European Commission > INSPIRE > INSPIRE Geoportal > HOME

ENHANCING ACCESS TO EUROPEAN SPATIAL DATA

INSPIRE GEOPORTAL

Home High-Value Data Sets Thematic Data Harvesting status Find out more about

### Welcome to the INSPIRE Geoportal

The INSPIRE Geoportal is the central European access point to the data provided by EU Member States and several EFTA countries under the INSPIRE Directive. The Geoportal allows:

- monitoring the availability of INSPIRE data sets;
- discovering suitable data sets based on their descriptions (metadata);
- accessing the selected data sets through their view or download services.

The metadata used in the Geoportal are regularly harvested from the discovery services of EU Member States and EFTA countries. The status of harvesting is available [here](#).

Feedback regarding the functionality as well as data set availability is welcome [here](#).

#### High-Value Data Sets

The application provides an overview and access to geospatial high-value datasets and other core data (including priority data sets for eReporting).

[Browse](#)

#### INSPIRE Thematic Data

The application displays the availability and provides access to all EU MS data sets falling under the scope of INSPIRE Directive filtered by data themes and countries (i.e. Annex I, II and III).

[Browse](#)

#### INSPIRE Reference Validator

The validator application is to help data providers, solution providers and national coordinators to check whether their data sets, network services and metadata meet the requirements defined in the INSPIRE Technical Guidelines. The validation tests are based on the Abstract Test Suites agreed between Member States and the Commission in the INSPIRE Maintenance and Implementation Group.

[Go to INSPIRE Reference Validator](#)

# INSPIRE Geoportal

## Revamp – Backend: GeoNetwork (AWS cloud)



- Prototype:  
Available and revised
- Working system:  
Delivered  
JRC Testing finished  
GeoCat finishing  
reviewed delivery

The screenshot displays the 'My GeoNetwork catalogue' interface. On the left, a sidebar shows 'Catalog harvesters' and 'Catalog harvester report'. The main area is divided into two panels. The left panel, titled 'Harvester', lists several harvesters: AT, BE-GEO, BE-GEOBRU (highlighted), BE-VLAANDEREN, BE-WALLONIE, BG, CH, CY, and CZ. Each entry shows its name, protocol (OGC CSW 2.0.2), and status (remote harvester), along with a 'Last run' status of 'Invalid date'. The right panel shows the configuration for the selected 'BE-GEOBRU' harvester. It includes a 'Harvest status' bar with a 'Harvest' button, tabs for 'Settings', 'Harvester history', and '106 Metadata records', and buttons for 'Delete' and 'Save'. The configuration is split into 'Identification' and 'Schedule' sections. The 'Identification' section includes fields for 'Node name and logo' (BE-GEOBRU), 'Group' (Belgium), and 'User' (admin admin (admin)). The 'Schedule' section has 'Enable' and 'disable' buttons. Below these are configuration options for the OGC CSW 2.0.2 protocol, including a 'Service URL' field containing 'https://geobru-geonetwork.irisnet.be/geonetwork/inspire/fre/csw', a checkbox for 'Process CSW endpoints in the service metadata', and a 'Number of records to retrieve per request' field set to 20.

# INSPIRE Geoportal beta-testing

## Overview

- **70 MIG-T – Beta-testing plan announcement.**  
7<sup>th</sup> July 2022
- **1st Training session - Revamped INSPIRE Geoportal backend.**  
15<sup>th</sup> July 2022
- **Ad-hoc Online Survey (beta-testing feedback).**  
22<sup>nd</sup> July 2022 - 15<sup>th</sup> October 2002
- **2nd Q&A Training session - Revamped INSPIRE Geoportal backend.**  
5<sup>th</sup> October (today)
- **3rd Training session – Revamped INSPIRE Geoportal (backend + frontend/UI).**  
Beginning November 2022
- **INSPIRE Geoportal revamp.**  
End November 2022
- **M&R round 2022.**  
15<sup>th</sup> December 2022

# INSPIRE Geoportal backend beta-testing

## Participation and scope

- The JRC harvested all national endpoints, obtaining global results (34 endpoints).
- Countries that requested participation in beta-testing:  
**AT, BE (4), CH, CZ, DE, EE, EL, ES, FI, HR, IT, LU, MT, NL, PL, PT, SK** (20 endpoints).
- MS / EFTA countries testing representativeness: 59%
- **IS** also requested to participate today!

# Preliminary results

04/10/2022

	Participant in beta-testing & survey
	Requested participation in beta-testing

	Improved result
	Equal result
	Decreased result
	Non successful harvest

COUNTRY	OLD GEOPORTAL						NEW GEOPORTAL (AWS)						
	Harvest date	N. dataset metadata	N. series metadata	N. service metadata	N. viewable datasets	N. downloadable datasets	Harvest date	N. metadata records	N. dataset metadata	N. series metadata	N. service metadata	N. viewable datasets	N. downloadable datasets
AT	29/09/2022	713	0	617	500	482	23/09/2022	1329	712	0	617	486	671
BG	20/09/2022	175	0	38	20	85	23/09/2022	219	176	0	38	79	79
CH	20/09/2022	207	3	34	4	0	23/09/2022	255	209	3	34	4	EMPTY
CY	16/09/2022	42	0	61	36	35	23/09/2022	103	42	0	61	37	37
CZ	15/09/2022	66	25	195	78	74	23/09/2022	286	66	25	195	77	60
DK	22/09/2022	203	0	246	100	96	23/09/2022	451	205	0	246	93	100
EE	05/09/2022	87	1	113	55	54	23/09/2022	208	88	1	119	59	59
EL	19/09/2022	45	0	98	39	42	23/09/2022	143	45	0	98	44	43
ES	16/09/2022	240	1	302	170	174	23/09/2022	543	240	1	302	200	164
FI	19/09/2022	567	67	218	230	258	23/09/2022	855	567	67	218	232	267
FR	20/09/2022	167	54	54	13	49	23/09/2022	275	167	54	54	39	3
HR	19/09/2022	134	17	235	94	38	04/10/2022	386	134	17	215	99	38
HU	19/09/2022	119	0	63	12	16	23/09/2022	189	110	0	59	17	19
IE	26/09/2022	74	0	21	45	51	23/09/2022	103	80	0	23	51	60
IS	16/09/2022	95	0	27	0	16	30/09/2022	123	95	0	28	EMPTY	EMPTY
LT	10/08/2022	132	0	122	60	92	23/09/2022						
LV	21/09/2022	156	1	240	96	99	23/09/2022	397	156	1	240	93	88
LU	20/09/2022	308	0	59	257	259	23/09/2022	367	308	0	59	270	289
LI	19/09/2022	72	0	3	12	11	23/09/2022	74	71	0	3	11	11
MT	16/09/2022	150	0	150	148	145	04/10/2022	300	150	0	150	148	143
NL	08/09/2022	206	1	350	130	124	23/09/2022	568	205	1	362	136	122
NO	20/09/2022	138	5	240	28	72	23/09/2022	383	138	5	240	28	59
PL	16/09/2022	143	4	246	81	87	04/10/2022						
PT	03/10/2022	496	5	524	273	243	23/09/2022	1025	496	5	524	363	317
RO	17/03/2022	102	1	76	33	35	04/10/2022	183	106	1	76	34	35
SE	23/09/2022	243	0	220	182	196	23/09/2022	464	243	0	221	181	186
SI	12/06/2022	98	0	131	57	47	23/09/2022	229	94	0	131	50	48
SK	16/09/2022	124	2	97	29	18	23/09/2022	683	265	2	416	172	119
DE	27/09/2022	79191	697	142000	62115	61364	27/09/2022	221990	79110	696	142178	53804	12990
BE 1 (Federal)	19/09/2022	89	0	47	72	74	29/09/2022	136	89	0	47	72	74
BE 2 (Geobru)	27/09/2022	56	0	50	44	38	29/09/2022	106	56	0	50	44	56
BE 3 (Wallonie)	20/09/2022	122	40	43	157	145	23/09/2022	204	122	39	43	157	159
BE 4 (MD Vlaan.)	20/09/2022	251	20	96	236	87	04/10/2022	374	258	20	96	247	163
IT	20/09/2022	6524	143	2076	523	780	24/09/2022	8743	6524	143	2076	565	480



# INSPIRE Geoportal backend beta-testing

## Preliminary results

- Legend:

	Participant in beta-testing & survey
	Requested participation in beta-testing
	Rate $\geq 1.05$
	$1.00 \leq \text{Rate} < 1.05$
	$0.95 \leq \text{Rate} < 1.00$
	Rate $\leq 0.95$
	Data equal to zero or not available.

COUNTRY	NEW INS-GPT / OLD INS-GPT				
	dsMD	srMD	sMD	vS	dS
Austria (AT)	1.00		1.00	0.97	1.39
Bulgaria (BG)	1.01		1.00	3.95	0.93
Switzerland (CH)	1.01	1.00	1.00	1.00	
Cyprus (CY)	1.00		1.00	1.03	1.06
Czech Republic (CZ)	1.00	1.00	1.00	0.99	0.81
Denmark (DK)	1.01		1.00	0.93	1.04
Estonia (EE)	1.01	1.00	1.05	1.07	1.09
Greece (EL)	1.00		1.00	1.13	1.02
Spain (ES)	1.00	1.00	1.00	1.18	0.94
Finland (FI)	1.00	1.00	1.00	1.01	1.03
France (FR)	1.00	1.00	1.00	3.00	0.06
Croatia (HR)	1.00	1.00	0.91	1.05	1.00
Hungary (HU)	0.92		0.94	1.42	1.19
Ireland (IE)	1.08		1.10	1.13	1.18
Iceland (IS)	1.00		1.04		
Lithuania (LT)	0.00		0.00	0.00	0.00
Latvia (LV)	1.00	1.00	1.00	0.97	0.89
Luxembourg (LU)	1.00		1.00	1.05	1.12
Liechtenstein (LI)	0.99		1.00	0.92	1.00
Malta (MT)	1.00		1.00	1.00	0.99
Netherlands (NL)	1.00	1.00	1.03	1.05	0.98
Norway (NO)	1.00	1.00	1.00	1.00	0.82
Poland (PL)	0.00	0.00	0.00	0.00	0.00
Portugal (PT)	1.00	1.00	1.00	1.33	1.30
Romania (RO)	1.04	1.00	1.00	1.03	1.00
Sweden (SE)	1.00		1.00	0.99	0.95
Slovenia (SI)	0.96		1.00	0.88	1.02
Slovakia (SK)	2.14	1.00	4.29	5.93	6.61
Germany (DE)	1.00	1.00	1.00	0.87	0.21
Belgium 1 (Federal)	1.00		1.00	1.00	1.00
Belgium 2 (Geobru)	1.00		1.00	1.00	1.47
Belgium 3 (Wallonie)	1.00	0.98	1.00	1.00	1.10
Belgium 4 (MD Vlaanderen)	1.03	1.00	1.00	1.05	1.87
Italy (IT)	1.00	1.00	1.00	1.08	0.62



# INSPIRE Geoportal backend beta-testing

## Preliminary conclusions

- Lithuania and Poland harvest are not running due to particular specificities in the national infrastructures – Bilateral meetings required.
- Slovakia: Nice unrealistic results due to coincidence of a unfortunate harvest with the Old Geoportal, used in comparison.
- Anomaly detected on indicators for download services (e.g. FR, DE, IT) – Need to jointly improve the system.
- Interesting to get feedback from MS/countries on which technologies are they specifically using for implementing download services.
- Other bilaterals will be offered to MS/countries to focus improvement.

# INSPIRE Geoportal backend beta-testing

## Survey

- Survey URL:

<https://ec.europa.eu/eusurvey/runner/INS-GPT-Backend-Beta-testing>

- Participants: 10 endpoints till 4<sup>th</sup> October 2022.

**AT, BE, DE, EL, FI, HR, NL, PL, PT, SK.**

- Started:

22<sup>nd</sup> July 2022

- Finished:

15<sup>th</sup> October 2022

# INSPIRE Geoportal backend beta-testing

## Survey results

- Evaluation

		Evaluation			
		Functionality	Usability	Performance	Improvement
NL	the Netherlands	Enough	Low	Enough	Roughly the same
NE	Belgium	Enough	Enough	Enough	No, slightly worse
AT	Austria	Enough	High	High	No, slightly worse
SK	Slovakia	Good	Enough	Enough	Yes, slightly better
FI	Finland	Good	Enough	Enough	Yes, slightly better
EL	GREECE	Good	Low	Very high	No, slightly worse
HR	Croatia	Enough	Enough	Enough	Roughly the same
DE	Germany	Good	High	Enough	Yes, a lot better
PT	Portugal	Good	High	Very high	Yes, a lot better
PL	Poland	Good	High	High	Yes, slightly better

# INSPIRE Geoportal

## Beta testing - Trainings

- 1<sup>st</sup> short training session (~1 hour) to allow them use the harvester, explore and test it.
  - Using GeoNetwork Sandbox instance.
  - 15<sup>th</sup> July 2022 - Video recording:  
<https://jrcbox.jrc.ec.europa.eu/index.php/s/VaJ6kfOpFpLqNQO>
- 2<sup>nd</sup> Training session (~2 hours) – Overview and analysis of survey results + Q/A session.
  - Using the new INSPIRE Geoportal AWS cloud instance.
  - 5<sup>th</sup> October 2022 - Video recording:  
<https://jrcbox.jrc.ec.europa.eu/index.php/s/Yen3R5fRxYignEu>
- Closing Ad-hoc Online Survey to provide feedback on beta-testing.
  - 15th October 2002
- 3<sup>rd</sup> Training session (~4 hours) – Full training on revamped INSPIRE Geoportal.
  - Using the new INSPIRE Geoportal AWS cloud instance.
  - Including: Backend + Geoportal UI & Publication System.
  - TBD – Beginning November 2022

# INSPIRE Geoportal

## Revamped User Interface

- Demonstration

- Ready. Performing final quality checks.
- Working in final integration with the revamped backend (GeoNetwork) in AWS instance.

The screenshot displays the INSPIRE Geoportal website. At the top, there is a navigation bar with the European Commission logo, a 'Log in' button, a language selector set to 'English', and a search box. Below this is a dark blue header with the text 'My GeoNetwork catalogue' and a menu with items: 'Home', 'Priority Data Sets Viewer', 'Thematic Data', 'Harvesting status', and 'Find out more about'. The main content area features a breadcrumb trail: 'European Commission > INSPIRE > Geoportal > Home'. A prominent heading reads 'Welcome to the INSPIRE Geoportal', followed by a paragraph explaining its role as the central European access point to INSPIRE data. A bulleted list highlights key features: monitoring data availability, discovering suitable data sets, and accessing selected data sets. Below this, there are three main sections: 'Priority Datasets' with a map and a fan icon, 'INSPIRE Thematic Data' with a map and a bar chart icon, and 'INSPIRE Reference Validator' with a text description. Each section includes a 'Browse' button. The footer is a dark blue bar with three columns: 'My GeoNetwork catalogue' (with a note about management by the European Commission), 'Contact' (with a 'Contact us' link), and 'Geoportal' (with links to Home, Priority Data Sets Viewer, and INSPIRE Thematic Viewer). A 'Related sites' section lists 'Knowledge Base', 'Validator', and 'Registry'.

# Keep in touch



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# Thank you!



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