



# Towards the Green Deal data space

## What is new in INSPIRE?



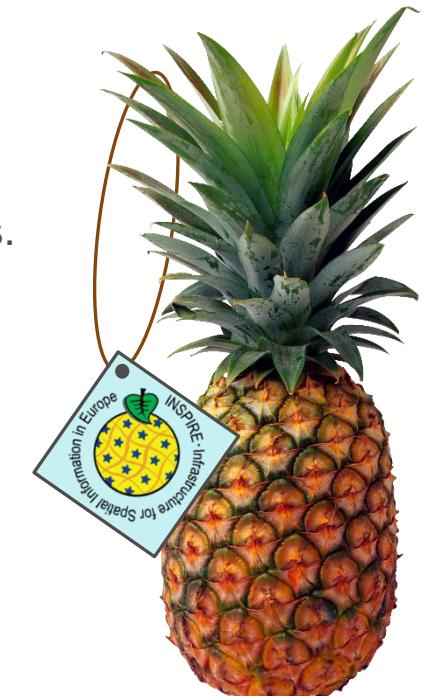
*Jordi Escriu*  
(EC-JRC INSPIRE Team)

*EuroGeographics Joint INSPIRE & POLICY KEN webinar*  
- "INSPIRE beyond 2020", 18<sup>th</sup> November 2021

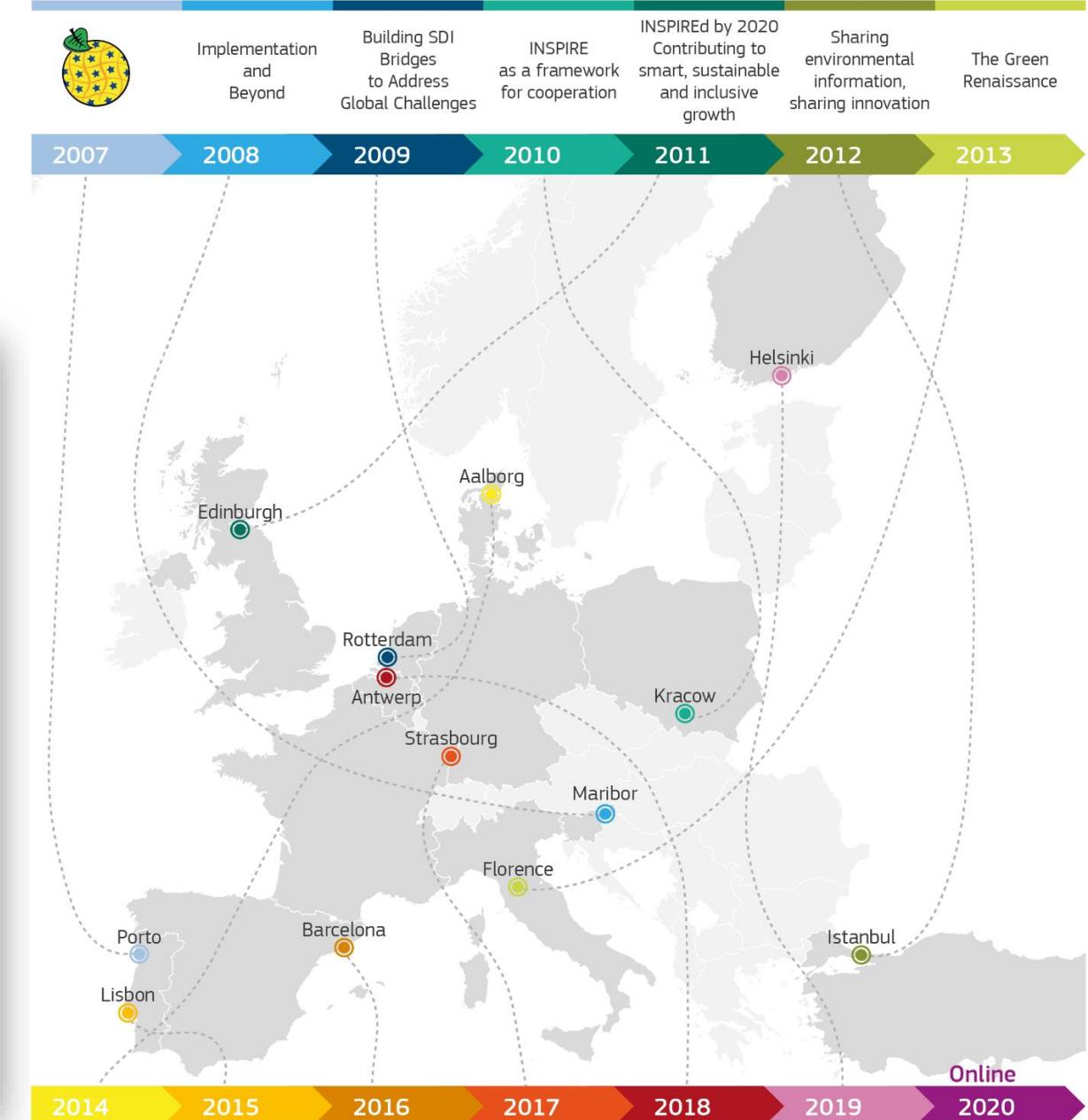
# INSPIRE

## The geospatial pineapple

- One of the biggest geospatial data sharing initiatives in the world (**7000+ providers**).
- **Multi-faceted Spatial Data Infrastructure** framework
  - **Legal:** Directive, Implementing provisions, transposition in MS.
  - **Organisational:**
    - Governance structure with National contact points / structures, Multiple Commission Services.
    - Maintenance and Implementation Work programme;
  - **Technical:** Reusing building blocks from standardisation bodies (OGC, ISO, etc.)
    - Full stack of guidelines for discoverability, metadata, data encoding and data sharing.
- **Status of implementation**
  - Directive entered into force in 2007 / Roadmap finished by December 2021.
  - **Lights and shadows.** Objectives partially achieved. Heterogeneity of implementations across EU. Pan European coverage yet to be achieved.



# Lights - What works well Community



INSPIRE  
for good  
governance

INSPIRE &  
Geospatial World  
Forum

INSPIRing  
a sustainable  
environment

INSPIRE a digital  
Europe: Thinking  
out of the box

INSPIRE users:  
Make it work  
together

INSPIRE Helsinki

Bringing  
sustainability and  
digitalisation together

Implementation  
and  
Beyond

Building SDI  
Bridges  
to Address  
Global Challenges

INSPIRE  
as a framework  
for cooperation

INSPIRED by 2020  
Contributing to  
smart, sustainable  
and inclusive  
growth

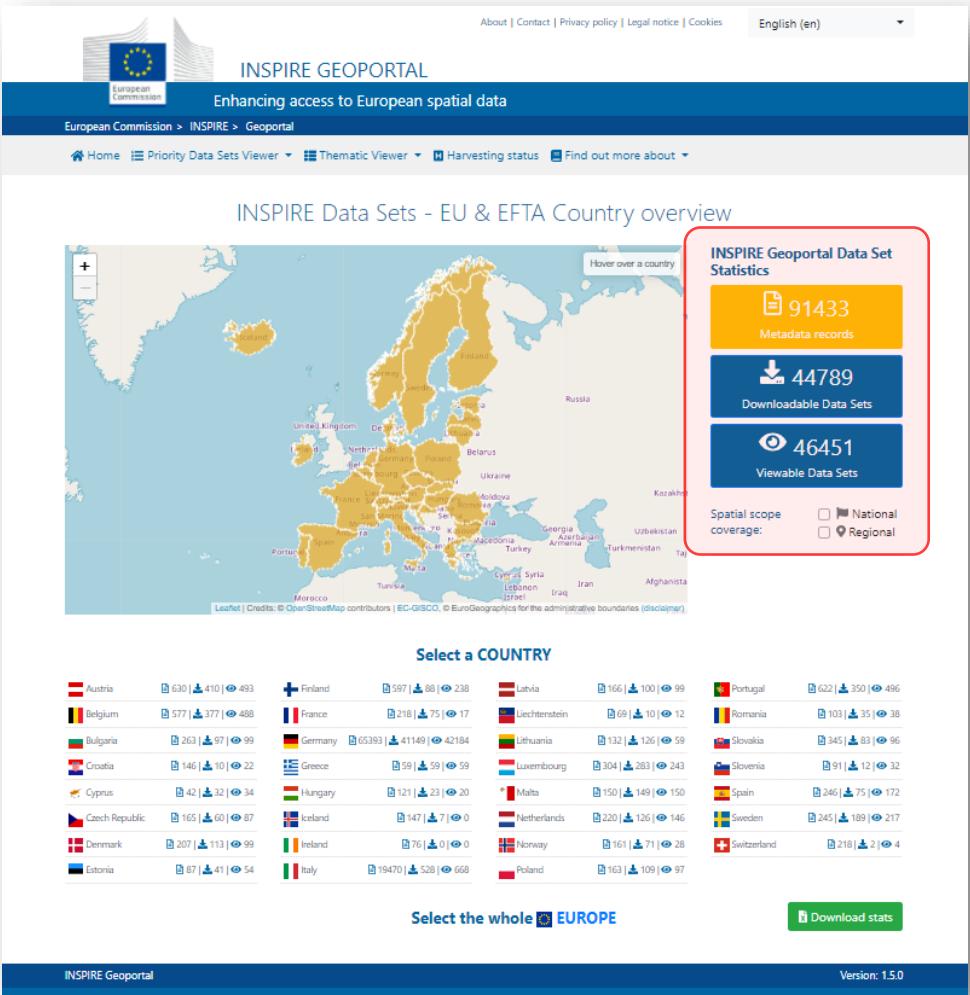
Sharing  
environmental  
information,  
sharing innovation

The Green  
Renaissance

# Lights - What works well

## Data availability & E-reporting

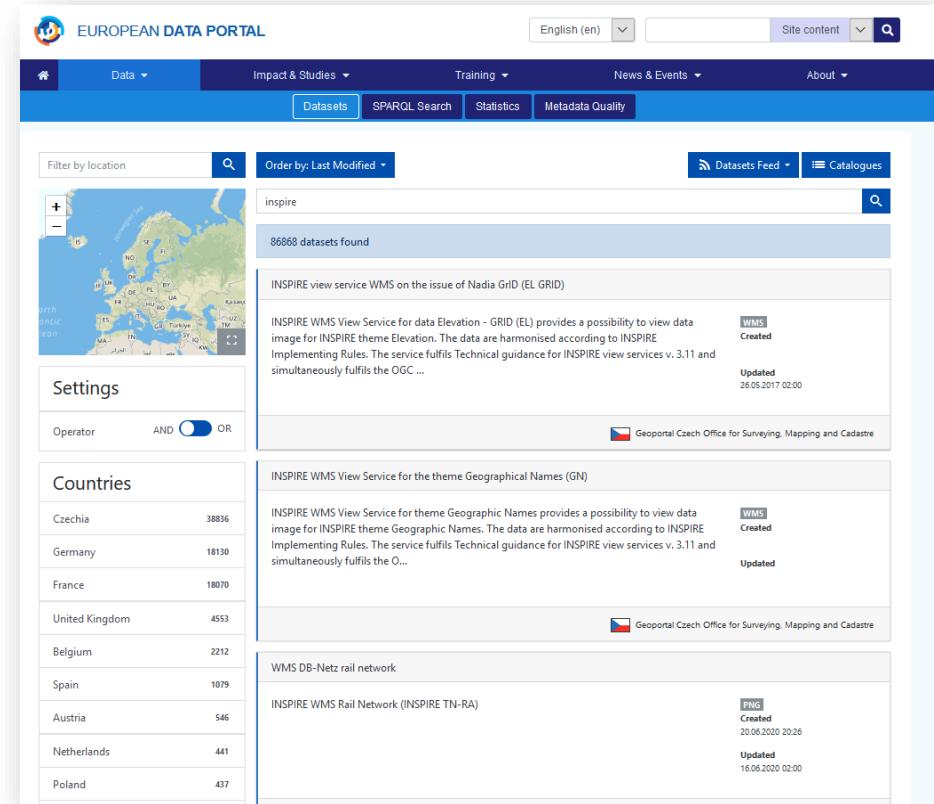
- Discoverability and accessibility are improving.
- Use of INSPIRE in e-reporting.



The screenshot shows the INSPIRE Geoportal homepage. At the top, there is a map of Europe with country names. A red box highlights a statistics box in the center of the page. The statistics box contains the following information:

INSPIRE Geoportal Data Set Statistics	
91433	Metadata records
44789	Downloadable Data Sets
46451	Viewable Data Sets
Spatial scope coverage: <input type="checkbox"/> National <input checked="" type="checkbox"/> Regional	

Below the statistics box, there is a section titled "Select a COUNTRY" with a table of European countries and their data availability. At the bottom, there is a "Select the whole EUROPE" button and a "Download stats" button.



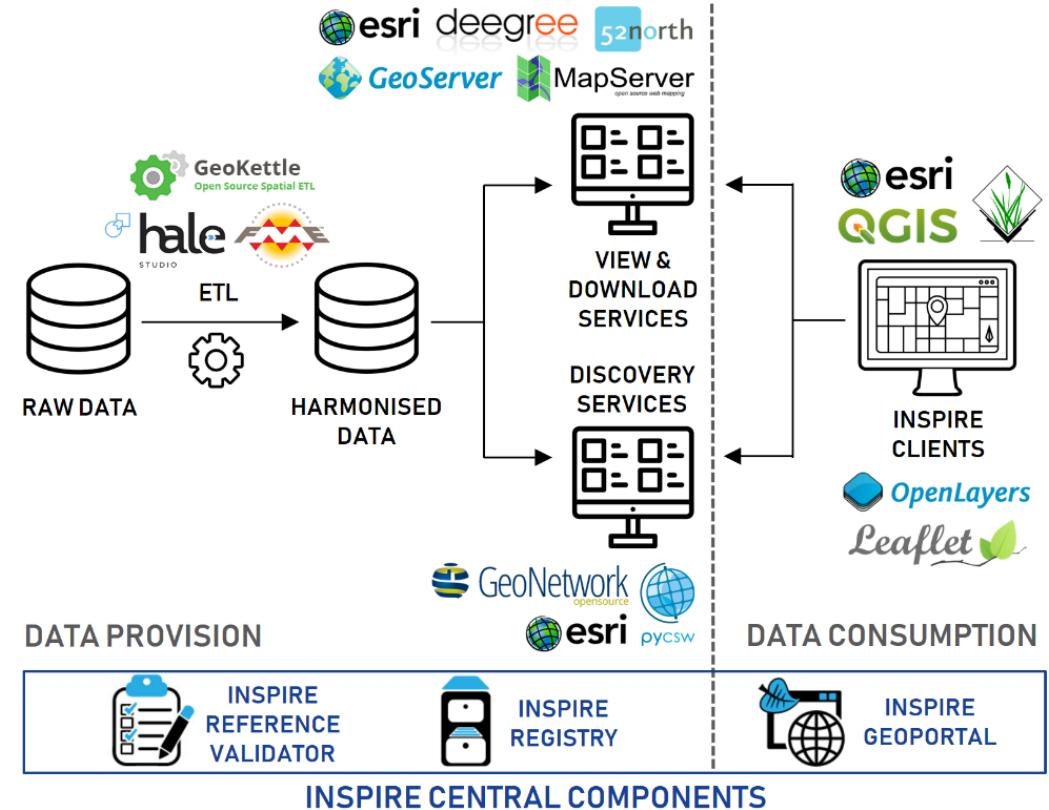
The screenshot shows the European Data Portal homepage. At the top, there is a search bar and a map of Europe. Below the map, there is a section titled "86868 datasets found" with a table of datasets. The table includes columns for "Name", "Type", "Created", and "Updated". The datasets listed are:

Name	Type	Created	Updated
INSPIRE view service WMS on the issue of Nadia GrD (EL GRID)	WMS	Created	26.05.2017 02:00
INSPIRE WMS View Service for data Elevation - GRID (EL) provides a possibility to view data image for INSPIRE theme Elevation. The data are harmonised according to INSPIRE Implementing Rules. The service fulfils Technical guidance for INSPIRE view services v. 3.11 and simultaneously fulfils the O...	WMS	Created	26.05.2017 02:00
Geoportal Czech Office for Surveying, Mapping and Cadastre			
INSPIRE WMS View Service for the theme Geographical Names (GN)	WMS	Created	Updated
INSPIRE WMS View Service for theme Geographic Names provides a possibility to view data image for INSPIRE theme Geographic Names. The data are harmonised according to INSPIRE Implementing Rules. The service fulfils Technical guidance for INSPIRE view services v. 3.11 and simultaneously fulfils the O...	WMS	Created	Updated
Geoportal Czech Office for Surveying, Mapping and Cadastre			
WMS DB-Netz rail network	WMS	Created	20.06.2020 20:00
INSPIRE WMS Rail Network (INSPIRE TN-RA)	WMS	Created	20.06.2020 20:00
Geoportal Czech Office for Surveying, Mapping and Cadastre			

# Lights - What works well

## Rich ecosystem of tools

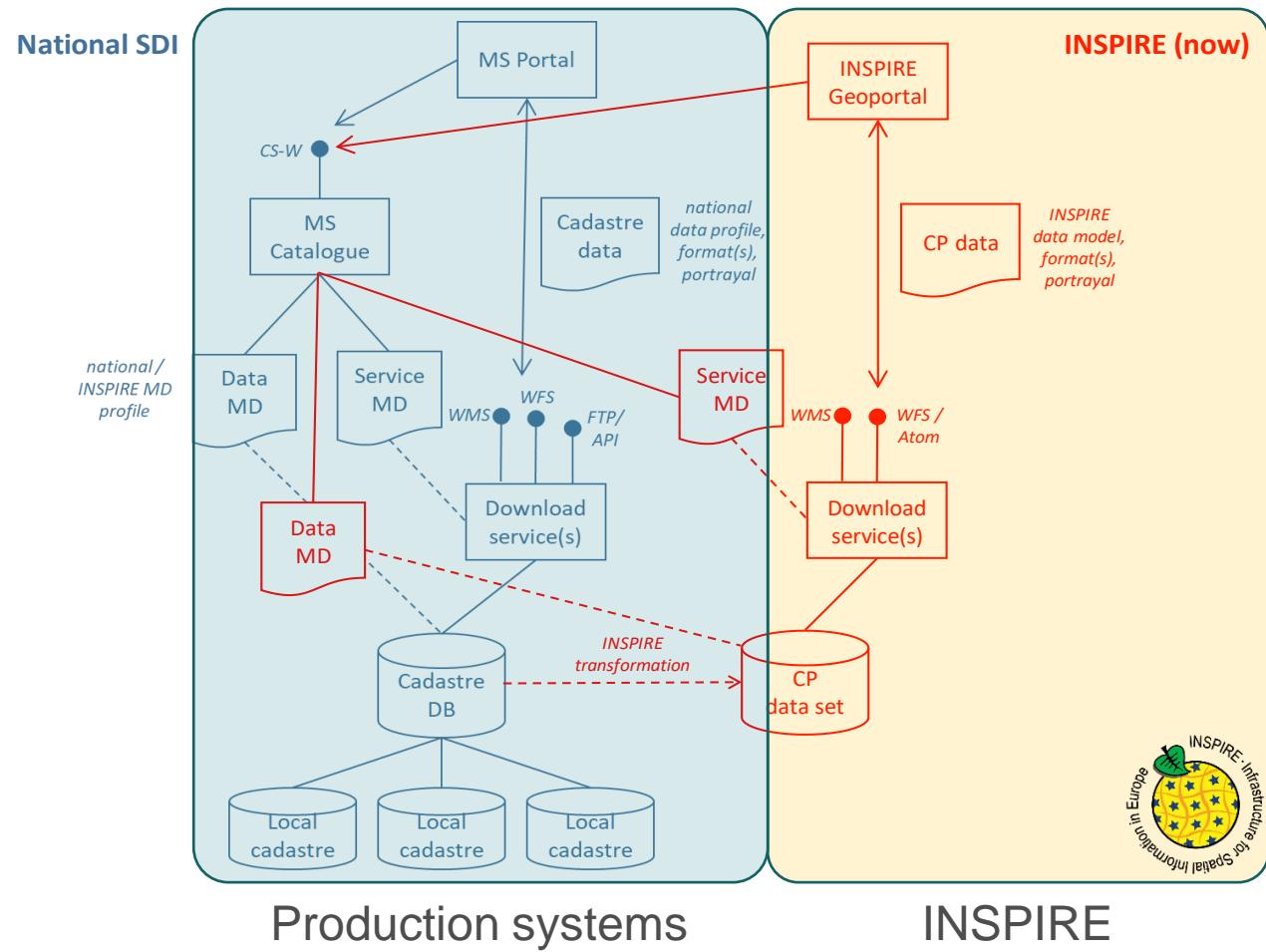
- Central INSPIRE components.
- Many client and server implementations.



# Shadows - What does not work so well

## Inappropriate organisational approaches

- Parallel implementations.
- Duplication of efforts.
- INSPIRE sometimes implemented to only check a box.



# Shadows - What does not work so well

## Inflexibility in standardisation

- Adherence to specific technologies / encodings.
- Strictly following standards vs. Narrow use of standards.
- Custom extensions: Extending standards is problematic.
  - Extended capabilities.
  - GML attributes.
  - Nested structures.



# Shadows - What does not work so well

## Complexity

```
<gn:NamedPlace gml:id="MIG20172_example_NamedPlace">
  <gn:beginLifespanVersion xsi:nil="true"/>
  <gn:geometry>
    <gml:Point gml:id="_d7180a8f-a590-44da-8b45-41d96d5cba5e" srsName="http://www.opengis.net/def/crs/EPSG/4326">
      <gml:pos>471979.2568 5564594.2444</gml:pos>
    </gml:Point>
  </gn:geometry>
  <gn:inspireId>
    <base:Identifier>
      <base:localId>NamedPlace_Example</base:localId>
      <base:namespace>https://www.examples.eu/</base:namespace>
    </base:Identifier>
  </gn:inspireId>
  <gn:localType xsi:nil="true"/>
  <gn:name>
    <gn:GeographicalName>
      <gn:language>deu</gn:language>
      <gn:nativeness xsi:nil="true"/>
      <gn:nameStatus xsi:nil="true"/>
      <gn:sourceOfName xsi:nil="true"/>
      <gn:pronunciation xsi:nil="true"/>
      <gn:spelling>
        <gn:SpellingOfName>
          <gn:text>München</gn:text>
          <gn:script xsi:nil="true"/>
        </gn:SpellingOfName>
      </gn:spelling>
    </gn:GeographicalName>
  </gn:name>
  <gn:name>
    <gn:GeographicalName>
      <gn:language>eng</gn:language>
      <gn:nativeness xsi:nil="true"/>
      <gn:nameStatus xsi:nil="true"/>
      <gn:sourceOfName xsi:nil="true"/>
      <gn:pronunciation xsi:nil="true"/>
      <gn:spelling>
        <gn:SpellingOfName>
          <gn:text>Munich</gn:text>
          <gn:script xsi:nil="true"/>
        </gn:SpellingOfName>
      </gn:spelling>
    </gn:GeographicalName>
  </gn:name>
  <gn:type xsi:nil="true"/>
</gn:NamedPlace>
```



<https://www.openstreetmap.org/node/1700534808#map=12/48.1332/11.6462>

# What is ahead

## New Policy context

- “Europe fit for the Digital Age” priority of the new European Commission:
  - Data-driven innovation.
  - Adding value to Europe’s economy and society.
- **European Strategy for Data:**
  - Establishment of a single market for data through sector-specific data spaces.
  - Different actors interplaying in the data economy (public sector, businesses, citizens, and academia)
- **Open Data Directive** (and forthcoming Implementing Act):
  - Provision and sharing of public sector High-Value Datasets (many of them geospatial).
- **INSPIRE**: Public-sector contribution to the **Green Deal data space**.

# What is ahead

## Technological trends

- New data sources:
  - Internet of Things (IoT).
  - Citizen-generated geospatial data.
  - Open research data.
  - Private data.
- Application Programming Interfaces (APIs) – From data collection to data connection.
- Novel architectures.
- Agile standards.
- Mature tools.



# INSPIRE Evaluation & Future JRC Science for Policy Report

- **INSPIRE - A Public Sector Contribution to the European Green Deal Data Space**

<https://publications.jrc.ec.europa.eu/repository/handle/JRC126319>

- Prepared with Geonovum and DG ENV.
- Sneak peek:
  - Overview of the status
  - Policy and technological context
  - Lessons learned
  - Vision for the technological evolution
  - Actions and roadmap
  - Prototype reference framework

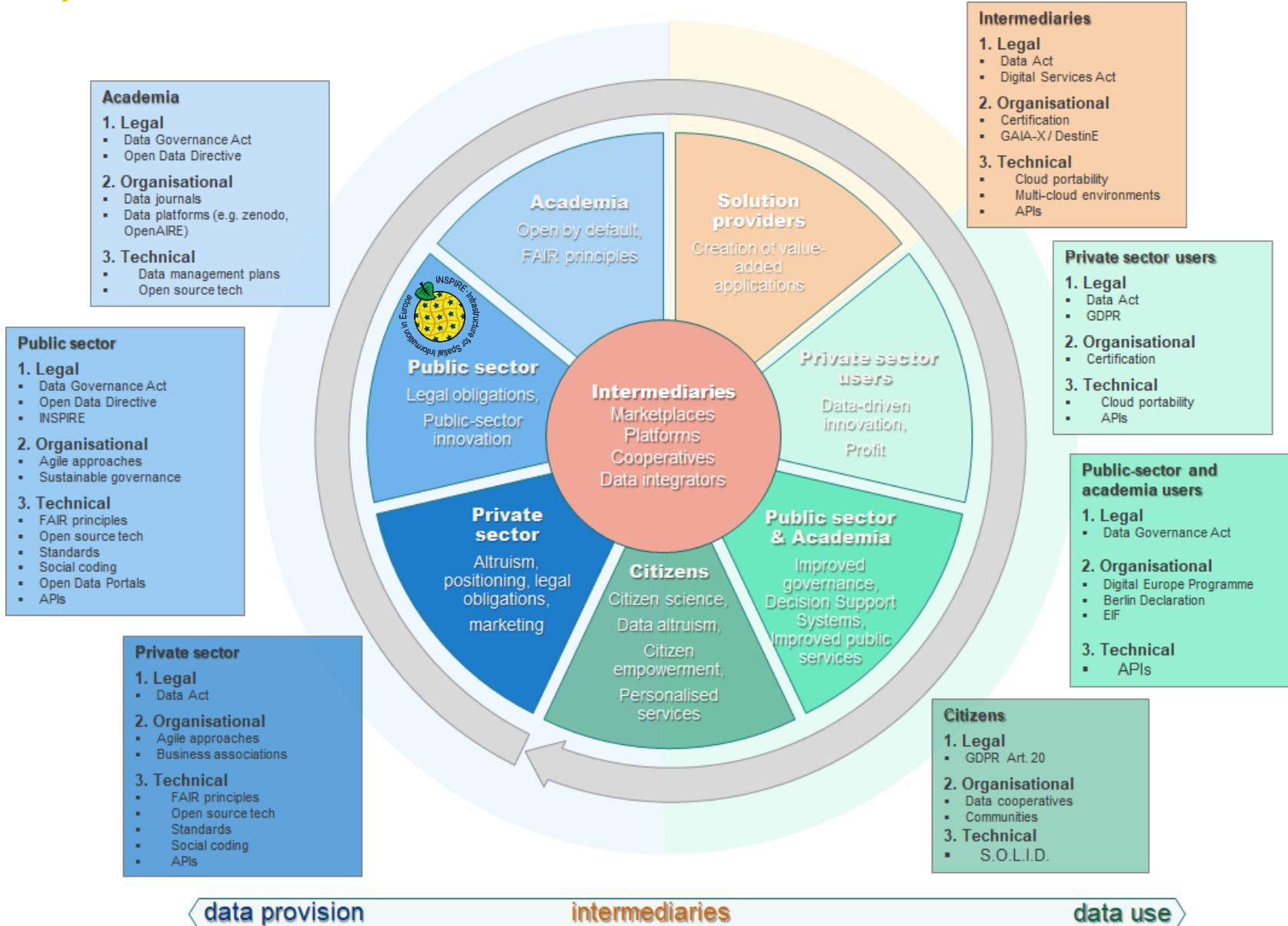


# INSPIRE Future Vision



- INSPIRE should '**blend in**' with the broader ecosystem of spatial and non-spatial data, infrastructures, technologies and policies.
- This will mean **opening up to a broader community** of implementers and users, and to a wider range of applications and use cases.
- Making the INSPIRE framework more **flexible and agile** will significantly lower the entry level to the sharing and utilisation of data.
- Technical **approaches need to be simplified** by reusing well-adopted standards and technologies.

# INSPIRE In a broader data ecosystem



- From a linear approach to a data ecosystem:
  - Cross-sectoral.
  - Creation of value.
  - Sustainable governance model.



# Addressing the challenge

## Maintenance and Implementation Work programme

(MIWP 2021-2024)

**Context for modernising the technological framework of INSPIRE.**

### **6 core actions**

- 1.1 Towards a digital ecosystem for the environment and sustainability
- 2.1 Need-driven data prioritisation
- 2.2 Roadmap for priority-driven implementation
- 2.3 Simplification of INSPIRE implementation
- 2.4 Central infrastructure components
- 3.1 GreenData4all initiative



# INSPIRE Central Components

An update



*Jordi Escriu*  
(EC-JRC INSPIRE Team)

*EuroGeographics Joint INSPIRE & POLICY KEN webinar*  
- "INSPIRE beyond 2020", 18<sup>th</sup> November 2021

# INSPIRE Central Components

## Core for delivering INSPIRE

### INSPIRE Toolbox

- INSPIRE Geoportal.
- INSPIRE Reference Validator.
- INSPIRE Registry.

### INSPIRE Framework

- Technical guidelines.
- Application schemas.

# INSPIRE Central Components

## Sustainability approach

- Support by tools is the default.
- Build strategic partnerships with communities:  
OSGeo, GeoNetwork
- Focus on the INSPIRE-specificity and not on mainstream tool development.
- Harmonise the approaches for helpdesk.
- Decouple tools from infrastructure.
- Extensive use of the cloud.



Sustainability of the INSPIRE core infrastructure components – Analysis and recommendations

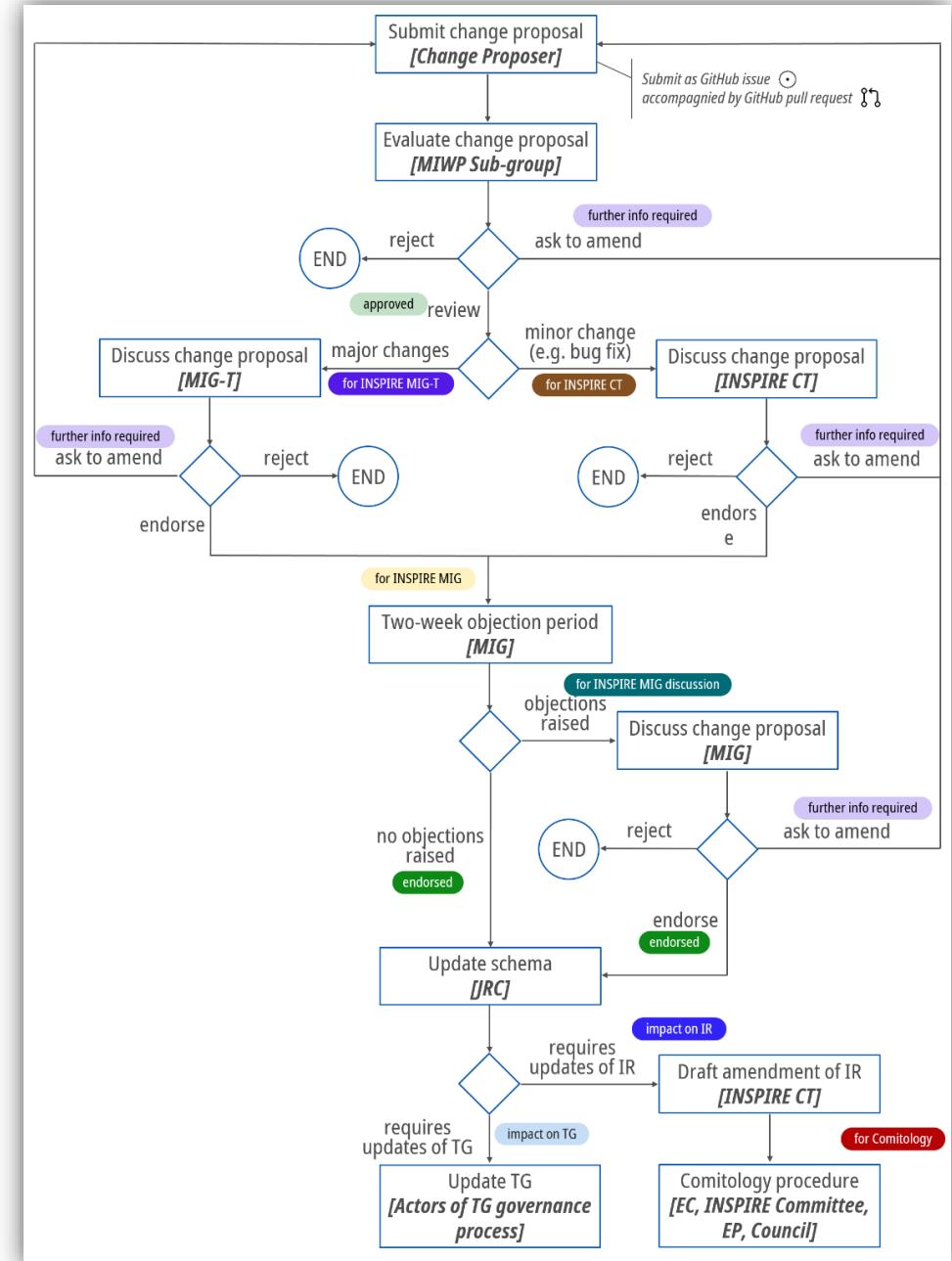
Michael Lutz  
Alexander Kotsev  
Marco Minghini  
Vlado Cetl  
Karen Fullerton  
Daniele Francioli  
Robert Tomas  
Lorena Hernandez



# INSPIRE Central Components

# Governance

- Open the floor to proposals from the community:
  - INSPIRE Helpdesks (GitHub)
  - INSPIRE Good Practices
- Transparent approach for governance:
  - MIG-T Meetings Actions and Sub-groups.
  - Decision tree and release plan:
    - Know how to approach each issue.
    - Releases planned during the year, aligned with MIG-T Meetings.



# The Toolbox INSPIRE Geoportal

Main access point to  
INSPIRE Infrastructure tools  
and resources.

Based on own development.  
(GeoNetwork, in near future)

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

[About](#) | [Contact](#) | [Privacy policy](#) | [Legal notice](#) | [Cookies](#)

 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](#)

### 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](#).

**Priority Data Sets Viewer**



Credits: Map data: Google, Map styles: snazzymap, Icons: Nick Roach

The application displays the availability and provides access to the selected priority data sets used for environmental reporting. It allows filtering by environmental domain, environmental legislation and country, as well as individual priority data sets.

[Browse Priority Data Sets](#)

**INSPIRE Thematic Viewer**



Credits: Map data: Google, Map styles: snazzymap, Icons: INSPIRE

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 Thematic Data Sets](#)

**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 validator](#)

# The Toolbox

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

### Highlights

- Renewal of functionality (Backend): **Ongoing**
  - Migration to a **GeoNetwork**-based architecture
    - Maintaining functionality of the current Geoportal.
    - Improved harvesting processes and performance.
  - Migration to a cloud environment: assure system availability / scalability.
- Renewal of user interface (Frontend): **Ready!**
  - Allows filtering INSPIRE datasets according to **High-Value Datasets** (HVDs).
  - Launch waiting for the publication of the HVDs Implementing Act.

# The Toolbox

## INSPIRE Geoportal (Backend prototype) - Ongoing

My GeoNetwork catalogue   Search   Map   Contribute   Admin console

admin admin   English

**Catalog harvesters**

Harvester	Last run
AT (OGC CSW 2.0.2 (remote harvester))	Invalid date
BE-GEO (OGC CSW 2.0.2 (remote harvester))	Invalid date
<b>BE-GEOBRU (OGC CSW 2.0.2 (remote harvester))</b>	Invalid date
BE-VLAANDEREN (OGC CSW 2.0.2 (remote harvester))	Invalid date
BE-WALLONIE (OGC CSW 2.0.2 (remote harvester))	Invalid date
BG (OGC CSW 2.0.2 (remote harvester))	Invalid date
CH (OGC CSW 2.0.2 (remote harvester))	Invalid date
CY (OGC CSW 2.0.2 (remote harvester))	Invalid date
CZ (OGC CSW 2.0.2 (remote harvester))	Invalid date

**Harvest status**

Settings   Harvester history   106 Metadata records

**Update harvester BE-GEOBRU**

**Identification**

**Node name and logo**  
BE-GEOBRU   

The name describing the remote node.

**Group**  
Belgium

Group which owns the harvested records. Only the catalog administrator or user admin of this group can manage this node.

**User**  
admin admin (admin)

User who owns the harvested records

**Configuration for protocol OGC CSW 2.0.2 (remote harvester)**

**Service URL**  
https://geobru-geonetwork.irisnet.be/geonetwork/inspire/fre/csw

CSW URL with or without GetCapabilities parameters

**Process CSW endpoints in the service metadata**

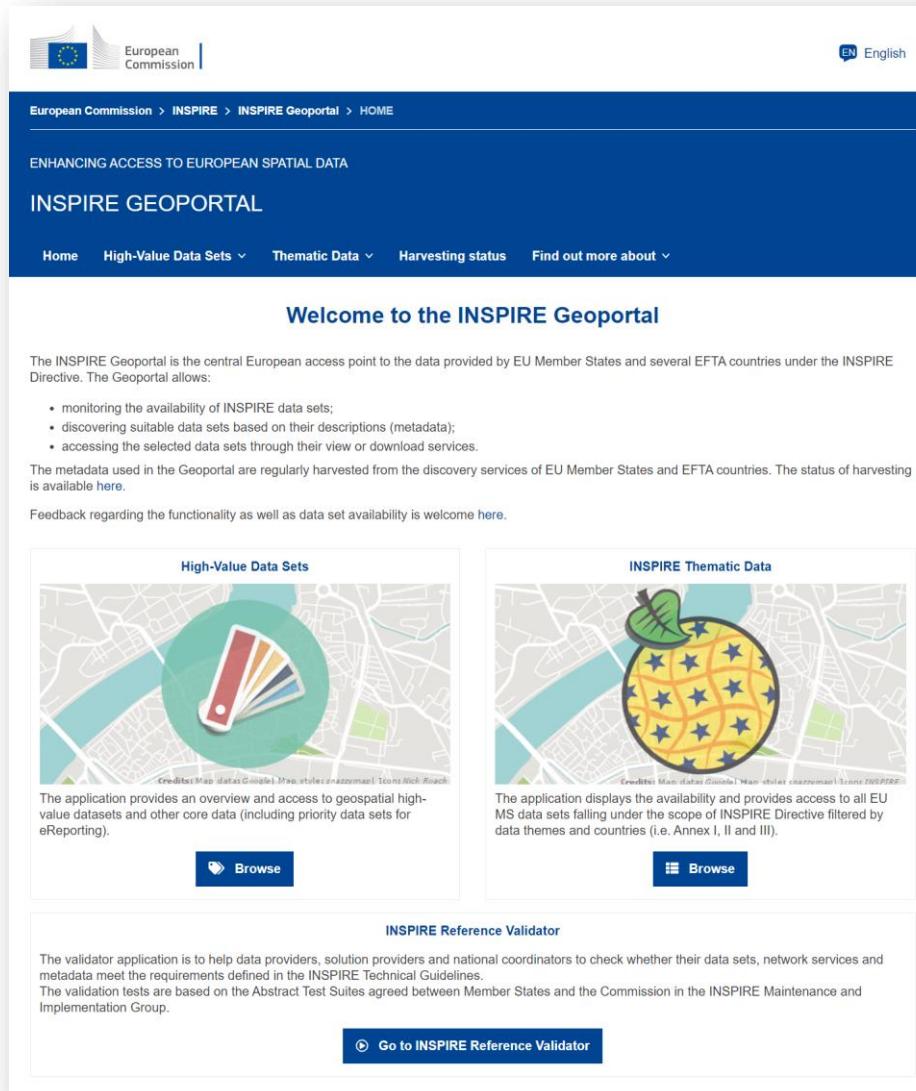
Harvest the metadata of the CSW endpoints referenced by the service metadata.

**Number of records to retrieve per request**  
20

# The Toolbox

## INSPIRE Geoportal (Frontend prototype)

- Ready!
- It will be launched when the High Value Datasets (HVDs) Implementing Act is published and enters in force.



The screenshot shows the homepage of the INSPIRE Geoportal. At the top, the European Commission logo and a language selector for English are visible. The main header reads "ENHANCING ACCESS TO EUROPEAN SPATIAL DATA" and "INSPIRE GEOPORTAL". Below the header, a navigation bar includes 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". It explains that the portal is the central European access point for data from EU Member States and EFTA countries under the INSPIRE Directive. It lists three main functions: monitoring data availability, discovering suitable datasets, and accessing selected datasets. It also mentions that metadata is harvested from discovery services and provides a link to the harvesting status. Below this, there are two sections: "High-Value Data Sets" (with a color fan icon) and "INSPIRE Thematic Data" (with a globe icon). Each section has a "Browse" button. At the bottom, there is a "INSPIRE Reference Validator" section with a brief description and a "Go to INSPIRE Reference Validator" button.

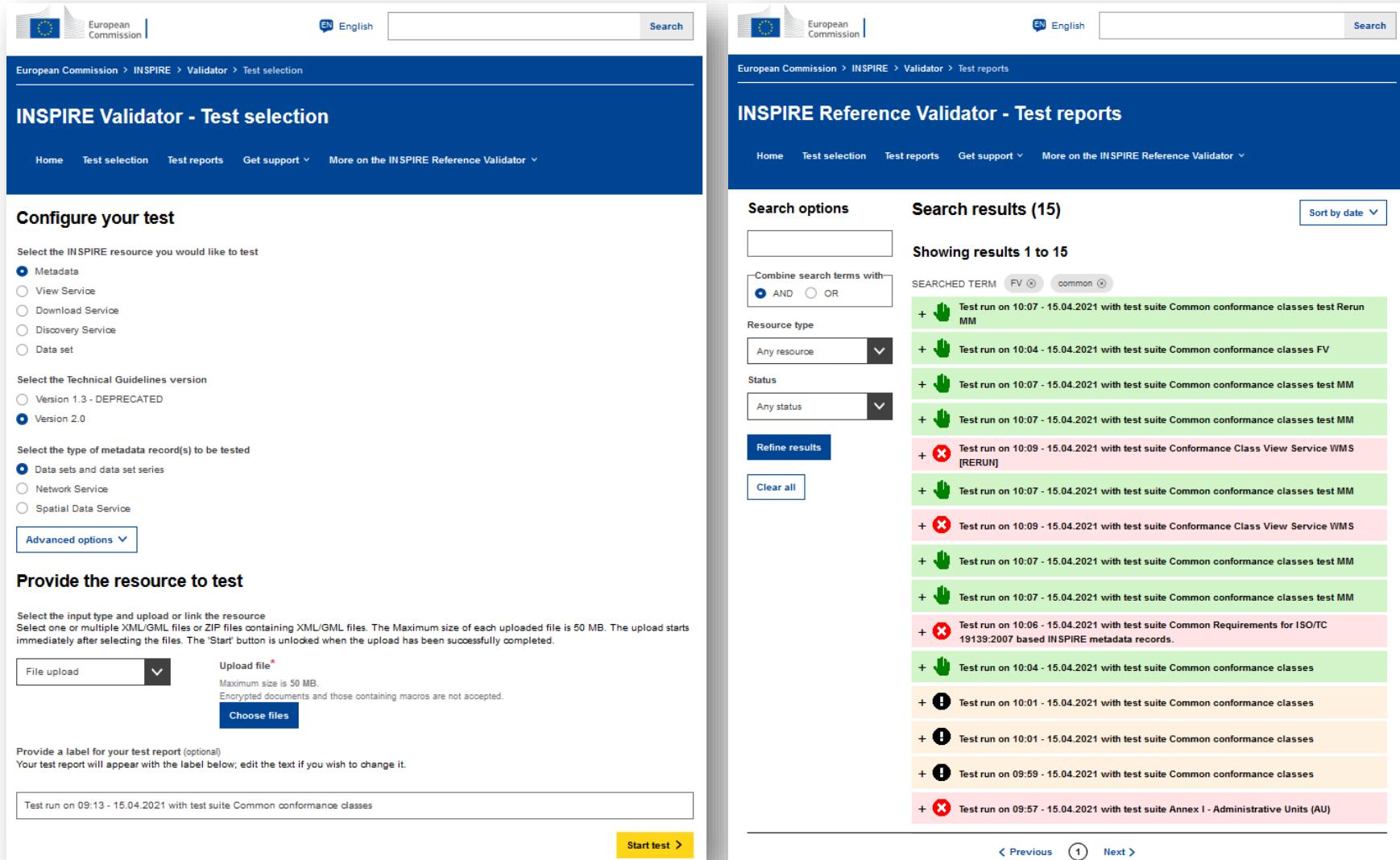
# The Toolbox

## INSPIRE Reference Validator

Tool used in assessing conformance of INSPIRE resources.

Based on the ETF (open source) software.

<https://inspire.ec.europa.eu/validator>



**INSPIRE Validator - Test selection**

Configure your test

Select the INSPIRE resource you would like to test

- Metadata
- View Service
- Download Service
- Discovery Service
- Data set

Select the Technical Guidelines version

- Version 1.3 - DEPRECATED
- Version 2.0

Select the type of metadata record(s) to be tested

- Data sets and data set series
- Network Service
- Spatial Data Service

Provide the resource to test

Select the input type and upload or link the resource.

Select one or multiple XML/GML files or ZIP files containing XML/GML files. The Maximum size of each uploaded file is 50 MB. The upload starts immediately after selecting the files. The 'Start' button is unlocked when the upload has been successfully completed.

File upload

Upload file \* Maximum size is 50 MB. Encrypted documents and those containing macros are not accepted.

Provide a label for your test report (optional)

Your test report will appear with the label below; edit the text if you wish to change it.

Test run on 09:13 - 15.04.2021 with test suite Common conformance classes

Start test >

**INSPIRE Reference Validator - Test reports**

Search options

Search results (15)

Showing results 1 to 15

SEARCHED TERM FV common

Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test Rerun MM
+  Test run on 10:04 - 15.04.2021 with test suite Common conformance classes FV
+  Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test MM
+  Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test MM
+  Test run on 10:09 - 15.04.2021 with test suite Conformance Class View Service WMS [RERUN]
+  Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test MM
+  Test run on 10:09 - 15.04.2021 with test suite Conformance Class View Service WMS
+  Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test MM
+  Test run on 10:07 - 15.04.2021 with test suite Common conformance classes test MM
+  Test run on 10:06 - 15.04.2021 with test suite Common Requirements for ISO/TC 19139:2007 based INSPIRE metadata records.
+  Test run on 10:04 - 15.04.2021 with test suite Common conformance classes
+  Test run on 10:01 - 15.04.2021 with test suite Common conformance classes
+  Test run on 10:01 - 15.04.2021 with test suite Common conformance classes
+  Test run on 09:59 - 15.04.2021 with test suite Common conformance classes
+  Test run on 09:57 - 15.04.2021 with test suite Annex I - Administrative Units (AU)

Sort by date

< Previous 1 Next >

# The Toolbox

## INSPIRE Reference Validator

### Highlights (I)

- Governance and annual releases:  
<https://github.com/INSPIRE-MIF/helpdesk-validator/tree/master/release%20strategy>
- New user interface available (2<sup>nd</sup> release 2021).
- New version of the ‘Bulk validation’ tool (October 2021):  
<https://github.com/inspire-eu-validation/monitoring-bulk-validation-tool/releases/tag/v2021.1.0>
- Limitation of massive use of the Validator in production:  
New API gateway:  
max. 100 requests/week (200 for next Monitoring) and max. 1 request/second  
<https://github.com/INSPIRE-MIF/helpdesk-validator/issues/594>

# The Toolbox

## INSPIRE Reference Validator

### Highlights (II)

- New tests already available for testing:
  - Abstract and executable tests suites for INSPIRE Annex II/III Data Specifications:  
<https://github.com/INSPIRE-MIF/helpdesk-validator/issues/336>
- New tests planned for future releases:
  - OGC API – Features standard.
  - Datasets in the scope of the Common Agricultural Policy (IACS Data).
  - Simplified approach for linking metadata and services (data-service linking).

# The Toolbox INSPIRE Registry

Tool used for  
referencing common  
codes and concepts.  
Based on the Re<sup>3</sup>gistry  
(open source) software.

<https://inspire.ec.europa.eu/registry>



The screenshot shows the INSPIRE Registry homepage. At the top, there is a header with the European Commission logo and the text "INSPIRE Registry". Below the header, a breadcrumb navigation shows "European Commission > INSPIRE > INSPIRE registry". The main content area is titled "INSPIRE registry". A call-to-action box encourages users to "Help us improving the Re3gistry software! Please fill our quick survey at <http://europa.eu/!Bn84Ct>". Below this, there are sections for "ID" (http://inspire.ec.europa.eu/registry), "Label" (INSPIRE registry), "Content Summary" (a detailed description of the INSPIRE infrastructure), "Registry manager" (European Commission, Joint Research Centre), and "Other formats" (links to XML, ISO 19135, JSON, Atom, and CSV). The "Registers" section lists various registers with their labels: INSPIRE application schema register, INSPIRE code list register, INSPIRE enumeration register, INSPIRE feature concept dictionary, INSPIRE glossary, INSPIRE layer register, INSPIRE media-types register, INSPIRE metadata code list register, INSPIRE reference document register, and INSPIRE theme register. At the bottom, there are pagination controls for "Items per page" (50), "Showing 1 to 10 of 10 entries", and links for "First", "Previous", "1", "Next", and "Last". A footer note states: "The INSPIRE Registry has been developed under Action 1.17 of the ISA Programme: A Reusable INSPIRE Reference Platform." The footer also includes "Powered by: Re3gistry 1.3".

# The Toolbox

## INSPIRE Registry

### Highlights

- **Re<sup>3</sup>gistry v2**
  - Latest release (2.2.4) – 27th July 2021  
<https://github.com/ec-jrc/re3gistry/releases/tag/v2.2.4>
  - Current status:
    - **Completed**: Development, testing and security assessment.
    - **On-going**: Correction of bugs and new features (Target: beginning 2022).
- **INSPIRE Registry**
  - Currently based on Re3gistry v1.3
  - Update to Re3gistry v2 foreseen by January 2022.

# The Toolbox INSPIRE Registry

## Where to find it?

### Re3gistry 2 software

license EUPL 1.2

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#### About the Re3gistry 2

The Re3gistry 2 is a reusable open source solution for managing and sharing "reference codes".

It provides a consistent central access point where labels and descriptions for reference codes can be easily browsed by humans and retrieved by machines.

Reference codes are exchanged between applications to uniquely reference some 'thing'. They can be used to define sets of permissible values for a data field or to provide a reference or context for the data being exchanged. Examples are enumerations, controlled vocabularies, taxonomies, thesauri or, simply, 'lists of things'.

The Re3gistry 2 supports organisations in managing and updating reference codes in a consistent way.

The Re3gistry software version numbers comply with the [Semantic Versioning Specification 2.0.0](#).



<https://github.com/ec-jrc/re3gistry>



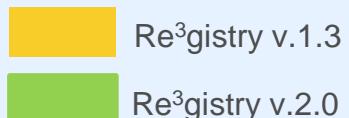
<https://joinup.ec.europa.eu/collection/a/re3na/solution/re3gistry/about>

# The Toolbox

## INSPIRE Registry

### Who is using it?

- **Public sector**
  - European Commission, national agencies Member States, ecc.
- **Private sector**
- **Other**
- In Europe, but not just!





# Flexibility in implementation

## INSPIRE GitHub repositories and Good practices



*Jordi Escriu*  
(EC-JRC INSPIRE Team)

*EuroGeographics Joint INSPIRE & POLICY KEN webinar*  
- "INSPIRE beyond 2020", 18<sup>th</sup> November 2021

# Opening and Mainstreaming INSPIRE

## GitHub Helpdesks

- GitHub works well!

<https://github.com/INSPIRE-MIF>

### 2 Levels of support:

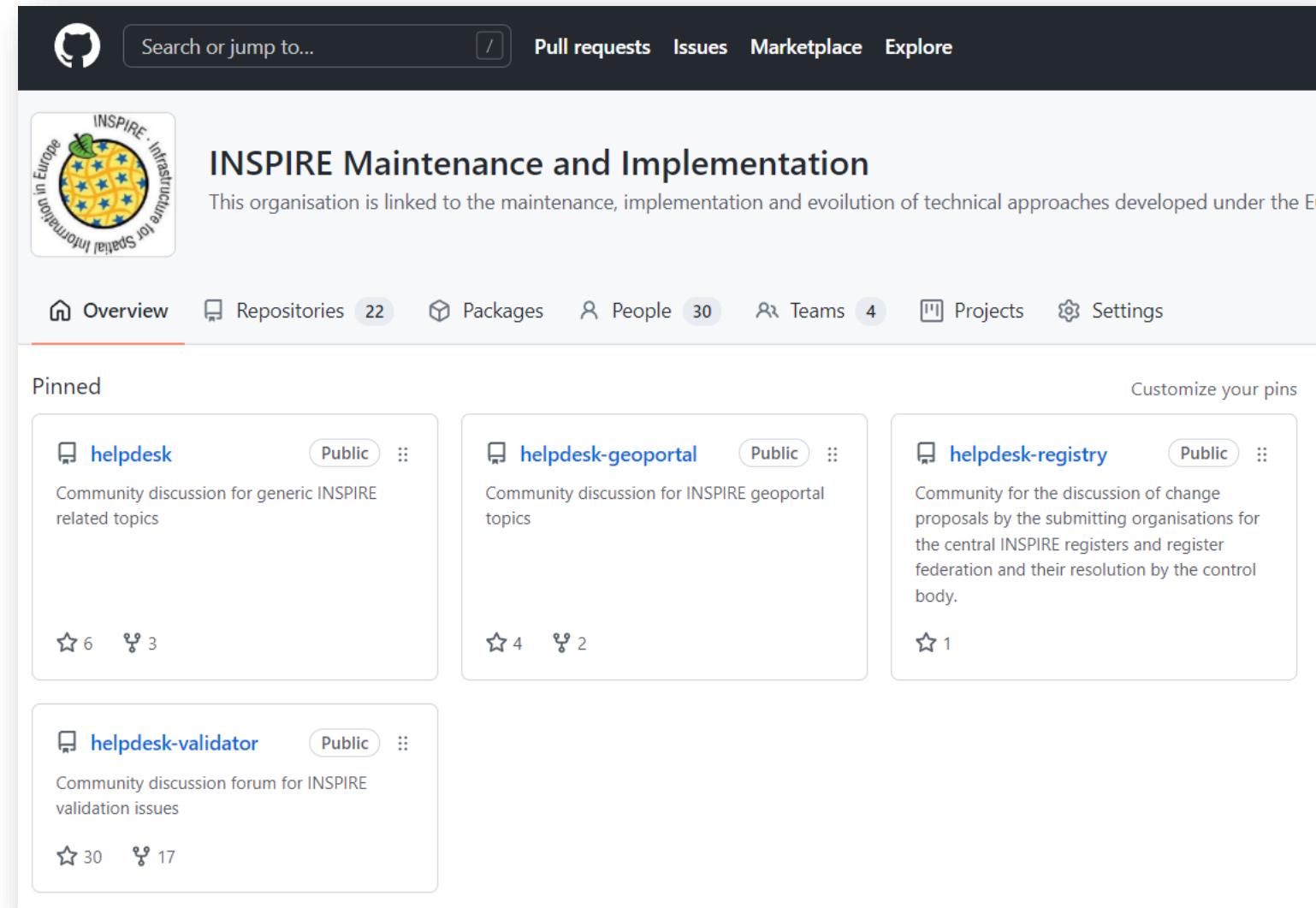
#### Level 1 –

General support – Includes:

- Checking requests.
- Immediate answering.
- Moving questions to the right Level 2, if needed.

#### Level 2 –

Provision of concrete solution.



The screenshot shows the GitHub organization page for "INSPIRE Maintenance and Implementation" (INSPIRE-MIF). The page features a dark header with the GitHub logo, a search bar, and navigation links for "Pull requests", "Issues", "Marketplace", and "Explore". Below the header is a circular profile picture of a yellow fruit with a green stem and a small leaf, with the text "INSPIRE - Infrastructure for Spatial Information in Europe" around it. The main content area is titled "INSPIRE Maintenance and Implementation" and includes a subtitle: "This organisation is linked to the maintenance, implementation and evolution of technical approaches developed under the European INSPIRE initiative." Below this, there are tabs for "Overview", "Repositories 22", "Packages", "People 30", "Teams 4", "Projects", and "Settings". The "Overview" tab is selected. A "Pinned" section displays four repositories: "helpdesk" (Public, 6 stars, 3 forks), "helpdesk-geoportal" (Public, 4 stars, 2 forks), "helpdesk-registry" (Public, 1 star), and "helpdesk-validator" (Public, 30 stars, 17 forks). A "Customize your pins" link is located in the top right corner of the pinned section.

# Opening and Mainstreaming INSPIRE INSPIRE Good Practices

- Good Practice library available.
- Procedure for proposing Good Practices and subsequent potential endorsement:
  - *Step 1. Initiation.*
  - *Step 2. Submission as candidate (MIG-T).*
  - *Step 3. Outreach.*
  - *Step 4. Submission (MIG).*
  - *Step 5. Legal scrutiny.*
  - *Step 6. Feedback.*

<https://inspire.ec.europa.eu/portfolio/good-practice-library>



The screenshot shows the INSPIRE Knowledge Base website. The top navigation bar includes links for About, Contact, Terms of use, Privacy Policy, Legal Notice, Cookies, and a language selector set to English (en). A search bar is also present. The main header features the European Commission logo and the text "INSPIRE KNOWLEDGE BASE" and "Infrastructure for spatial information in Europe". Below the header, a breadcrumb navigation shows European Commission > INSPIRE > Toolkit > Good Practice Library. The main content area has a sidebar with a "Quick search" section containing a list of topics such as Data and Service Sharing, Data Specifications, Implement, INSPIRE, INSPIRE in your Country, Learn, Maintenance and Implementation, Metadata, MIG Work Programme, Monitoring and Reporting, Network Services, Participate, Spatial Data Services, and Use. The main content area is titled "Good Practice Library" and contains sections for "Good Practice documents" (Candidate: [Building one access point to dispersed data sources](#); Endorsed: [GeoDCAT-AP](#), [SDMX for Human Health and Population Distribution](#), [OGC API – Features as an INSPIRE download service](#), [OGC SensorThings API as an INSPIRE download service](#), [OGC compliant INSPIRE Coverage data and service implementation](#)) and "Good Practice Template" (with a "Download Template" button). The "Context" section provides historical context about the development of INSPIRE and its implementation rules, mentioning the creation of IRs and TGs, and the evolution of the implementation process. It also discusses the development of related tools like the MIG Work Programme and the implementation of new technologies like Vector Tiles and OGC SensorThings API. The "Conclusion" section states that at least three types of good practice can be observed, with one example being related to INSPIRE implementation and extended data models.

# Keep in touch



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# Thank you!



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