

Training on Re3gistry/INSPIRE Registry and ETF/INSPIRE Reference Validator

JRC INSPIRE Team

May 29-31, 2024

Housekeeping rules

- Please **mute your microphone** when you are not talking.
- If, during the registration, you did not consent to having your picture taken and recorded during the event, please make sure to **keep your camera off**.
- During the Q&A sessions at the end of each training part, please **raise your hand** in order to be given the floor.
- During the whole training, you can **ask questions in the chat**: our team will do the best to address these in real-time.

The trainings

- **What:** overview of the Re3gistry and ETF open source software tools and their INSPIRE implementations (Registry and Reference Validator).
- **To whom:** everyone – from new to experienced users, developers & admins.
- **How:** through a mix of theoretical notions & hands-on demonstration .

Re3gistry and INSPIRE Registry - 29 May 2024, 9:30-12:30

9:30 - Welcome
9:35 - Introduction to the Re3gistry and the INSPIRE Registry
9:50 - Part 1. Getting started with the Re3gistry

- Installation
- Description of the application
- Creation of content & Data governance

10:30 - Q&A session
10:45 - Coffee break ☕
11:00 - Part 2. The Re3gistry in detail

- Specific Re3gistry features
- Frontend & Data consumption

12:10 - Re3gistry Starter Kit
12:15 - Q&A session

ETF and INSPIRE Reference Validator - 31 May 2024, 9:30-12:30

9:30 - Welcome and introduction to the training
9:35 - Introduction to the ETF and the INSPIRE Reference Validator: a business perspective
10:00 - Introduction to the ETF and the INSPIRE Reference Validator: a technical perspective
10:30 - Coffee break ☕
10:45 - Starter Kit for users, developers and admins
11:45 - Q&A session



Introduction to the Re3gistry and the INSPIRE Registry

JRC INSPIRE Team & Bilbomatica

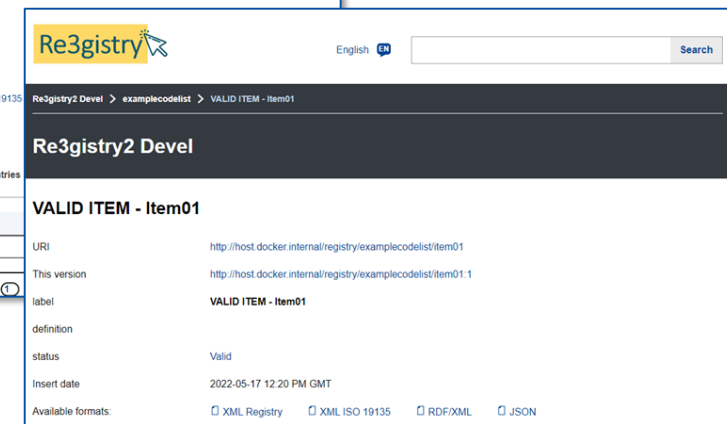
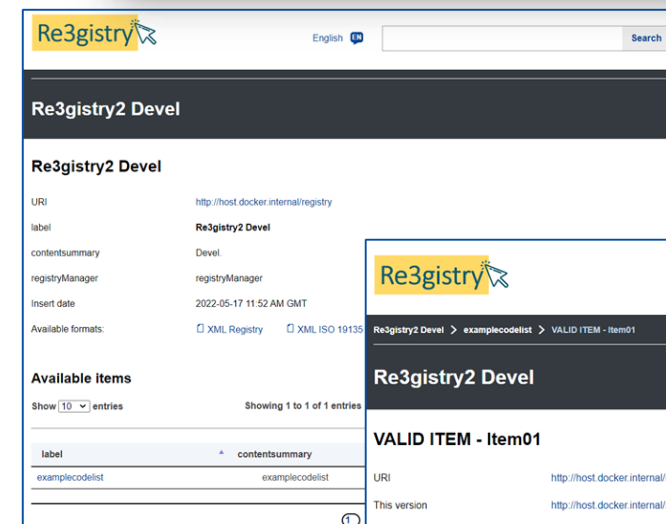
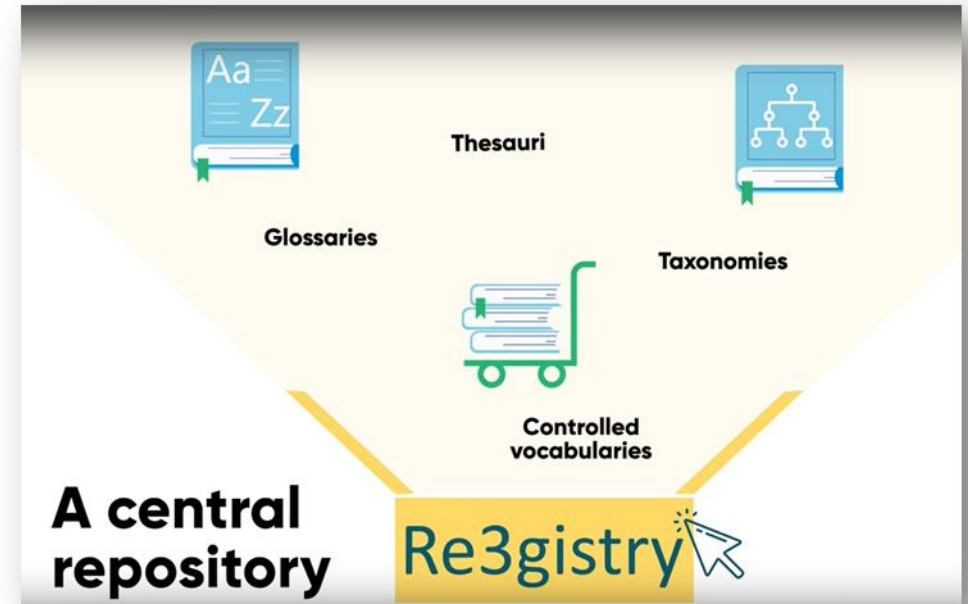
*Re3gistry and INSPIRE Registry training
May 29, 2024*

About Re3gistry

- The [Re3gistry](https://joinup.ec.europa.eu/collection/are3na/solution/re3gistry) provides a central access point, where commonly shared reference codes, their labels and descriptions.
- It can be easily browsed by humans while retrieved by machines through its REST API.

<https://joinup.ec.europa.eu/collection/are3na/solution/re3gistry>

- [Version 2.0](#) introduced key features such as an interactive administration interface.
- The latest version available is [v2.5.3](#).



What is the Re3gistry useful for?

- **Avoid common mistakes** (such as entering synonyms) or misspellings when filling out online forms.
- **Facilitate the internationalisation** of user interfaces and registered items, by providing multilingual labels.
- **Ensure semantic interoperability** when exchanging data between systems and applications.
- **Increase the value of references codes** if widely reused and referenced.



Background

- **2013** - the European Commission's Joint Research Centre (JRC) starts the development of the Re3gistry to **satisfy the semantic interoperability requirements set by the INSPIRE Directive**: the [INSPIRE Registry](https://inspire.ec.europa.eu/registry) is implemented.
- **2020** - Given its high reusability potential, it was decided to be **released as a generic open-source project** to support semantic interoperability across any organisation.



The screenshot displays the INSPIRE registry website. At the top, the browser address bar shows the URL <https://inspire.ec.europa.eu/registry>. The page header includes the European Commission logo, the language selector set to English, and a search bar. A blue navigation bar contains the text "INSPIRE registry". Below this, the main content area is titled "INSPIRE registry" and provides details about the registry, including its URI, label, content summary, registry manager, insert date, and available formats. A section titled "Available items" shows a list of 11 items, with the first item being "INSPIRE application schema register". A small circular logo with a pineapple and the text "INSPIRE Infrastructure for Spatial Information in Europe" is visible on the right side of the page.

European Commission

English EN

Search

European Commission > INSPIRE >

INSPIRE registry

INSPIRE registry

URI: <http://inspire.ec.europa.eu/registry>

Label: **INSPIRE registry**

Content summary: The INSPIRE infrastructure involves a number of items, which require clear descriptions and the possibility to be referenced through unique identifiers. Examples for such items include INSPIRE themes, code lists, application schemas or discovery services. Registers provide a means to assign identifiers to items and their labels, definitions and descriptions (in different languages). The INSPIRE registry provides a central access point to a number of centrally managed INSPIRE registers. The content of these registers are based on the INSPIRE Directive, Implementing Rules and Technical Guidelines.

Registry Manager: European Commission, Joint Research Centre

Insert date: 2013-05-28 15:30 PM CEST

Available formats: [\[X\]ML Registry](#) [\[X\]ML ISO 19135](#) [\[R\]DF/XML](#) [\[J\]SON](#) [\[C\]SV](#) [\[A\]TOM](#) [\[R\]OR](#)

Available items

Show entries Showing 1 to 10 of 11 entries Filter:

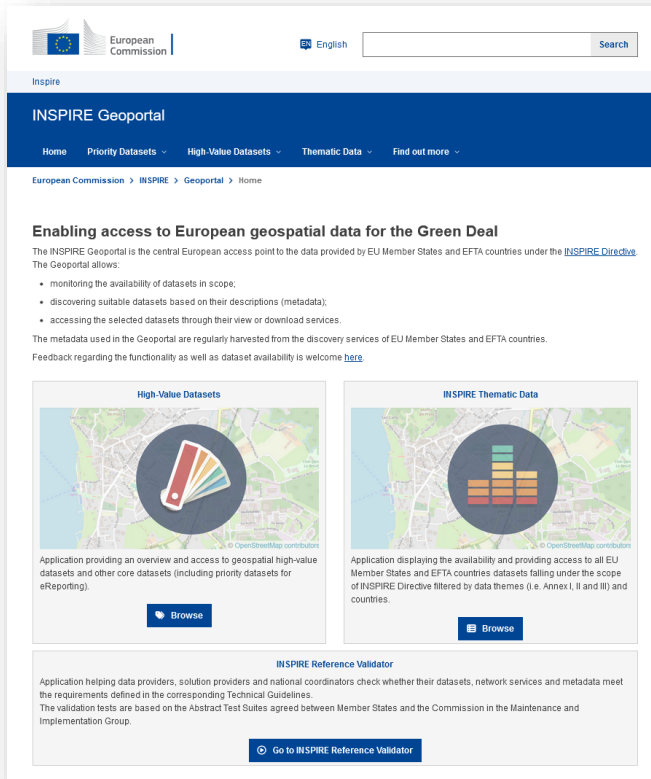
Label
INSPIRE application schema register
INSPIRE code list register
INSPIRE coordinate reference systems register
INSPIRE enumeration register
INSPIRE feature concept dictionary
INSPIRE glossary
INSPIRE layer register
INSPIRE media-types register
INSPIRE metadata code list register
INSPIRE reference document register

1 2 Next >

INSPIRE Registry

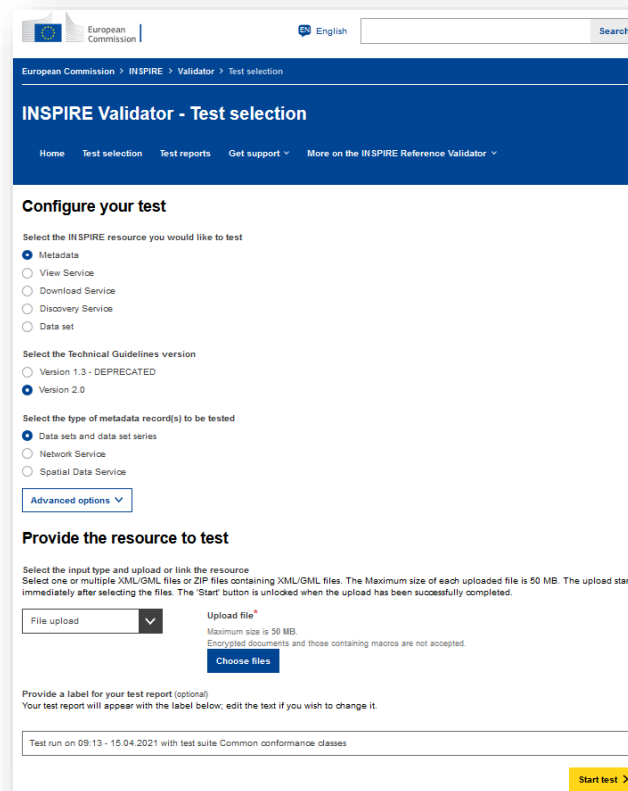
Part of the Core INSPIRE Central Components
of the European Infrastructure.

Reusability and implementations in MS.



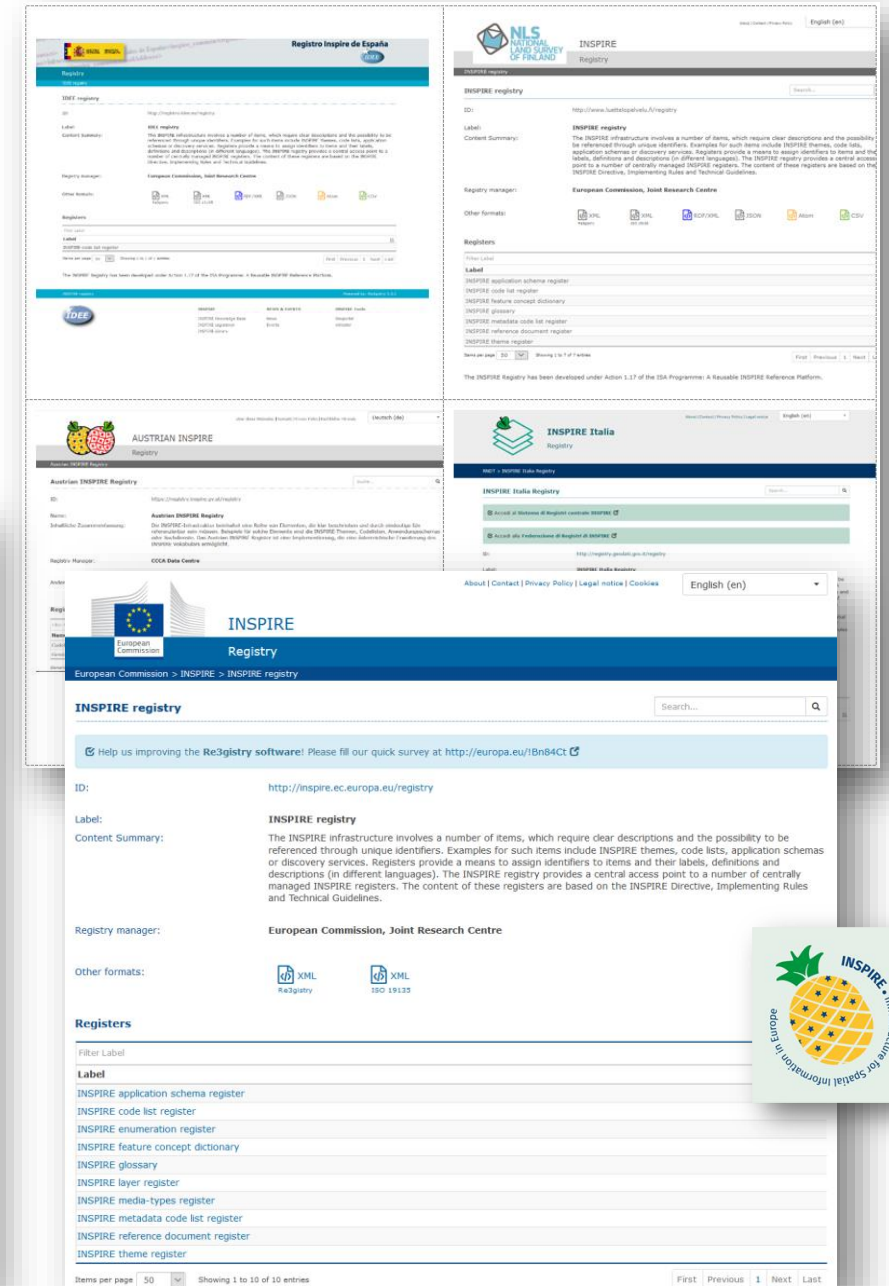
The screenshot shows the INSPIRE Geoportal homepage. It features the European Commission logo and a search bar. The main navigation bar includes links to Home, Priority Datasets, High-Value Datasets, Thematic Data, and Find out more. Below the navigation bar, there is a section titled "Enabling access to European geospatial data for the Green Deal" which explains the purpose of the Geoportal and lists its functions: monitoring dataset availability, discovering datasets, and accessing datasets. Two featured sections, "High-Value Datasets" and "INSPIRE Thematic Data", each show a map and a "Browse" button. At the bottom, there is a section for the "INSPIRE Reference Validator" with a "Go to INSPIRE Reference Validator" button.

INSPIRE Geoportal



The screenshot shows the INSPIRE Validator - Test selection page. It includes the European Commission logo and a search bar. The main heading is "INSPIRE Validator - Test selection". Below this, there is a "Configure your test" section with radio buttons for "Metadata", "View Service", "Download Service", "Discovery Service", and "Data set". There is also a section for "Select the Technical Guidelines version" with radio buttons for "Version 1.3 - DEPRECATED" and "Version 2.0". A "Select the type of metadata record(s) to be tested" section has radio buttons for "Data sets and data set series", "Network Service", and "Spatial Data Service". An "Advanced options" button is present. The "Provide the resource to test" section has a "File upload" button and an "Upload file" section with a "Choose files" button. At the bottom, there is a "Start test" button.

INSPIRE Reference Validator



The screenshot shows the INSPIRE Registry page. It features the European Commission logo and a search bar. The main heading is "INSPIRE Registry". Below this, there is a "Help us improving the Re3gistry software!" section with a link to a survey. The "ID:" field shows "http://inspire.ec.europa.eu/registry". The "Label:" field shows "INSPIRE registry". The "Content Summary:" section provides a detailed description of the INSPIRE infrastructure. The "Registry manager:" field shows "European Commission, Joint Research Centre". The "Other formats:" section lists "XML" and "ISO 19135". The "Registers" section lists various registers including "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 is a "Start test" button.

INSPIRE Registry



INSPIRE Registry Contents



- Different registers available

Available items

Show entries

Showing 1 to 10 of 11 entries

Filter:


Label
INSPIRE application schema register
INSPIRE code list register
INSPIRE coordinate reference systems 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

1 2 Next >

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

Re3gistry

Open Source - OSGeoLive



The screenshot shows the Re3gistry website interface. At the top is the OSGeoLive logo with a navigation bar containing links for Home, Contents, Download, Metrics, Sponsors, and Contact Us. Below this is a language selection bar with options: English, Deutsch, Español, Suomen kieli, Français, Hungarian, Italiano, and 日本語. The main content area is titled 'Re3gistry' and includes an 'About' section. The 'About' section states: 'The Re3gistry 2 is a reusable open source solution for managing and sharing "reference codes". Initially developed as a central component of the EU's INSPIRE infrastructure, 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.'

Below the 'About' section is the 'Core Features' section, which lists the following features:

- User-friendly editing interface to easily add, edit and manage the registers and reference codes
- Management of the full lifecycle of the reference codes (based on the ISO 19135 Standard)
- Highly flexible and customisable data models
- Multi-lingual content support
- Support for versioning
- RESTful API with content negotiation (including OpenAPI 3 descriptor)
- Free-text search
- Supported formats: HTML, ISO 19135 XML, JSON, RDF/XML, Re3gistry XML, CSV, ATOM
- Service formats can be easily added or customised (default formats: JSON and ISO 19135 XML)
- Multiple authentication options
- Externally governed items referenced through URIs
- INSPIRE register federation format support (option to automatically create the RoR format)
- Web-app to access the reference codes in a human readable way.

Below the 'Core Features' section is the 'Details' section, which includes the following information:

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

Licence: EUPL

Software Version: 2.4.2

Supported Platforms: Windows, Linux

The right side of the screenshot shows a preview of the Re3gistry application interface. It features a search bar with a 'Buscar' button. Below the search bar is a section titled 'Re3gistry2 Devel' which displays metadata for a specific registry. The metadata includes:

- URI: http://test.docker.internal/registry
- label: Re3gistry2 Devel
- contentSummary: Devel
- registryManager: Registry Manager
- insert date: 2022-05-17 11:52 AM GMT

Below the metadata is a section titled 'Available Items' which shows a table of items. The table has columns for 'label', 'contentSummary', and 'status'. The table contains one row with the following data:

label	contentSummary	status
examplecodelist	examplecodelist	Valid

- Reusable open source software, licensed under EUPL.
- Included in OSGeoLive package: https://live.osgeo.org/en/overview/re3gistry_overview.html
- Easiest flexible way to install the application.

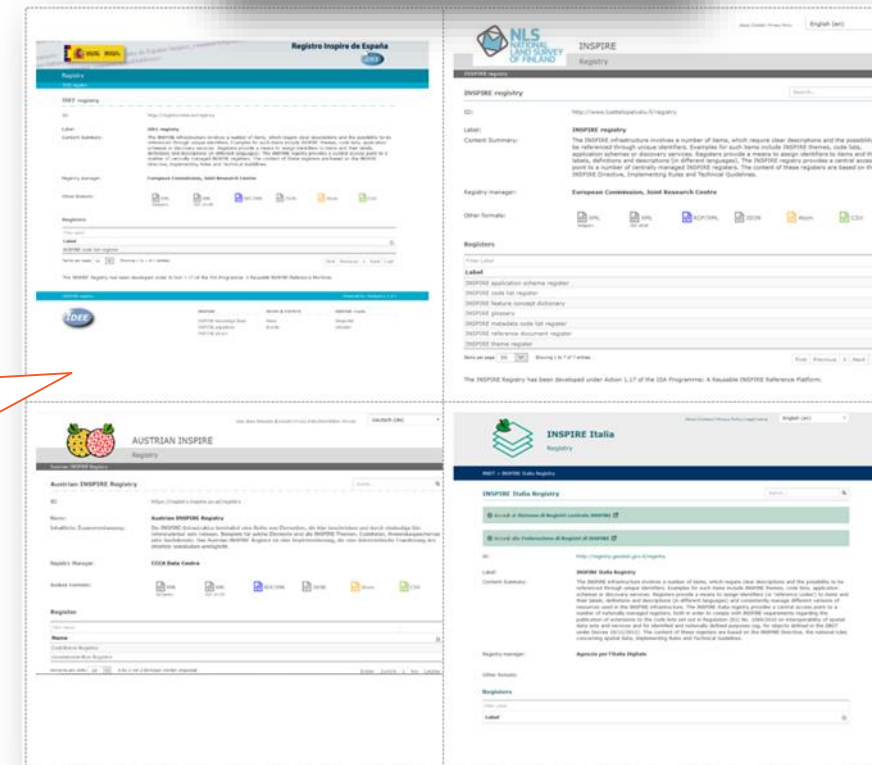
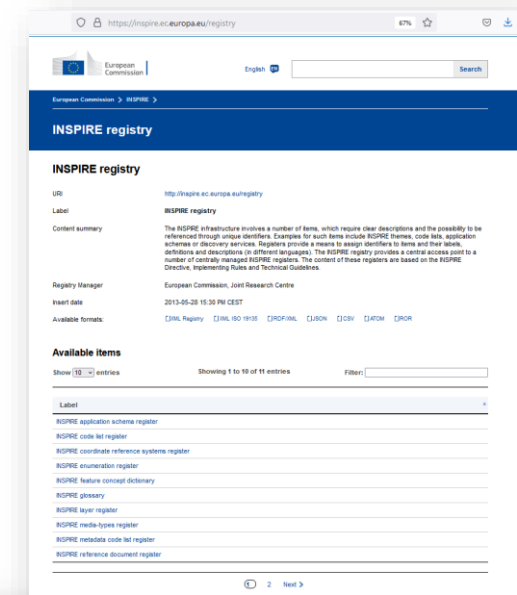
Re3gistry

Who is using it?

- **The European Commission:**
 - The **INSPIRE Registry** is the first and most popular instance based on the Re3gistry software.
 - The Publications Office of the European Union recently analysed the capabilities of the Re3gistry software for the publication of Corporate Reference Data Sets.
- **Agencies and companies in the Member States & EFTA countries**

Austria, Belgium, Czech Republic, Finland, Germany, Italy, Netherlands, Republic of North Macedonia, Slovakia, Spain.
- **Different EU-funded projects, private companies and organisations outside Europe** (e.g. **Republic of Colombia**).

<https://joinup.ec.europa.eu/collection/are3na/solution/re3gistry/re3gistry-reusers>



Re3gistry

Core features

- Collaborative platform.
- Intuitive user friendly interface (web-app) for administrators and users.
- Different options for managing the registers and reference codes, either based on:
 - ISO 19135 standard, or
 - Simplified workflow.
- Highly flexible and customisable data models.
- Multi-lingual content support.
- Persistent identifiers.
- Support for versioning (historic trace of versions).
- RESTful API with content negotiation (including OpenAPI 3 descriptor).
- Free-text search.
- Supported formats:
 - HTML, ISO 19135 XML, JSON, RDF/XML, Re3gistry XML, CSV, ATOM.
 - Service formats can be easily added or customised (default formats: JSON and ISO 19135 XML).
- Multiple authentication options.
- Possibility to add externally governed items referenced through URIs.
- INSPIRE register federation format support (option to automatically create the RoR format).

Register Federation Tool (RoR)

Example: INSPIRE Register Federation



The screenshot shows the INSPIRE Register Federation web application. The browser address bar displays <https://inspire.ec.europa.eu/register-federation/>. The page header includes the European Commission logo, the INSPIRE logo, and a language dropdown set to English (en). The main navigation bar contains links for Registries, Registers, Relations, Federated search, and Help, along with a Login button. The 'Registries' section is active, displaying a table of registries.

Filter Label	Filter Publisher	Filter URI
Label	Publisher	URI
European Geoscience Registry	BRGM	https://data.geoscience.earth/nc/
Système de publication de registres de l'IDG française	BRGM	http://registre.geocatalogue.fr/registry
INSPIRE registry	European Commission, Joint Research Centre	http://inspire.ec.europa.eu/registry
EEA Data Dictionary vocabularies	European Environment Agency	http://dd.eionet.europa.eu/vocabularies
Austrian INSPIRE registry	CCCA Data Centre	http://registry.inspire.gv.at
INSPIRE Italia Registry	Agency for Digital Italy	http://registry.geodati.gov.it

<https://inspire.ec.europa.eu/register-federation/>

- Tool that allows to create a **distributed federation of registers**.
- The European Commission is implementing an **INSPIRE Register Federation** in the scope of the INSPIRE Directive.
- The **Register of Registers (RoR)**, is the central access point to the federation.
 - Provides information about the registers included in the federation and their relationships.
 - Allows searching for registers and the items contained in them.
 - Can be publicly accessed via graphic user interface or API.

Re3gistry & RoR GitHub repository

The screenshot shows the GitHub repository for 'ec-jrc / re3gistry'. The repository is public and has 78 branches, 26 tags, 21 forks, and 24 stars. The main content area displays a list of files and folders with their commit history. The 'About' section describes Re3gistry as a reusable open source solution for managing and sharing 'reference codes', ensuring semantic interoperability across organisations. The 'Releases' section shows the latest release, 2.5.3, dated 2024/03/27.

File/Folder	Commit Message	Time Ago
iratigarzon	Update README.md	d61a4b9 · 13 hours ago
apache_conf	Added Apache configuration file to enable http compres...	last year
dist	Hot fix to delete system.installed file	last week
documentation	Update user-manual.md	2 months ago
helpdesk-management	Update README.md	7 months ago
release-strategy	Updated text	last year
scripts	Added script to optimize DB queries	last year
sources	2.5.3 release config updates	2 months ago
.gitignore	Ignore target folders	3 years ago
CODE_OF_CONDUCT.adoc	add documents regarding the governance, contribution ...	2 years ago
LICENSE	First release of the Re3gistry 2 software	4 years ago
README.md	Update README.md	13 hours ago
SECURITY.md	Create SECURITY.md	3 years ago
contribution.md	update manager with technical manager	2 years ago

About
Re3gistry is a reusable open source solution for managing and sharing 'reference codes', ensuring semantic interoperability across organisations.

Releases 25
2.5.3 2024/03/27 Latest
on Mar 27
+ 24 releases

- Code repository:
<https://github.com/ec-jrc/re3gistry>
- Release strategy:
<https://github.com/ec-jrc/re3gistry/tree/master/release-strategy>
- Issue helpdesk:
<https://github.com/ec-jrc/re3gistry/issues>

INSPIRE Registry GitHub repository

The screenshot shows the GitHub repository page for INSPIRE-MIF/helpdesk-registry. The repository is public and has 2 stars and 0 forks. The main branch is 'main' with 8 branches and 2 tags. The repository contains several files and folders, including .github/ISSUE_TEMPLATE, helpdesk-management, old, release strategy, README.md, change-proposal-guidelines.md, helpdesk-migration.md, registry-control-body-and-submitting-orga..., and submitting-organisations-list.md. The README file is selected, showing the title 'INSPIRE Registry helpdesk' and a description: 'This space is meant to discuss and propose changes to the content and the service of the INSPIRE registry. Please follow our Code of Conduct anytime when you interact with the INSPIRE community in this space. Please familiarise yourself with the governance process before opening new issues. You can check the release planning strategy for the plan of future releases of the INSPIRE Registry.'

INSPIRE-MIF / helpdesk-registry

Code Issues 19 Pull requests Discussions Actions Projects 1 Wiki Security Insights Settings

helpdesk-registry Public

main 8 Branches 2 Tags

Go to file

Code

About

Community for the discussion of change proposals by the submitting organisations for the central INSPIRE registers and register federation and their resolution by the control body.

Readme Activity Custom properties 2 stars 24 watching 0 forks Report repository

Releases 2

2023.2 28/07/2023 Latest on Jul 28, 2023

+ 1 release

Packages

No packages published Publish your first package

Contributors 6

- Code repository:
<https://github.com/INSPIRE-MIF/helpdesk-registry>
- Release strategy:
<https://github.com/INSPIRE-MIF/helpdesk-registry/tree/main/release%20strategy>
- Issue helpdesk:
<https://github.com/INSPIRE-MIF/helpdesk-registry/issues>

Re3gistry

Latest releases

Latest releases:

- March 2024 (v2.5.3)

<https://github.com/ec-jrc/re3gistry/releases/tag/v2.5.3>

- December 2023 (v2.5.2)

<https://github.com/ec-jrc/re3gistry/releases/tag/v2.5.2>

Next release:

- June 2024 (v2.6.0)

2.5.3 2024/03/27

Latest

 arantzaetxebarria released this Mar 27  v2.5.3  41ce0d2 

Release of version v.2.5.3 of the Re3gistry software with minor changes fixing bugs and adding new features.

New features

[#267](#) Force to change the password for the first time

[#212](#) Add default fields translations in all 23 official languages in the initialization script of creation of the database

[#357](#) Cache - Language independent caching

Bugs

[#349](#) The label field becomes empty when quotes are entered.

[#292](#) Improve the functionality of the creation of hyperlinked fields

[#215](#) Wrong display of the group in webapp

[#286](#) Language selector popup not working on backend

[#354](#) Version history for items not working correctly

[#344](#) CSS issue on form field errors

[#281](#) subtle installation issue with shiro + uppercase email

[#369](#) (Improvement) Wrong Registry Web page when Browser language is not an INSPIRE language

[#371](#) Old version of code list of country codes has wrong links

We've also updated the software documentation, check it out [here](#).

Re3gistry Next release

Release v2.6.0 - June 2024

- Milestone:
<https://github.com/ec-jrc/re3gistry/milestone/9>
- Focused on making improvements in:
 - Caching
 - Bulk edit functionality
 - Email notifications.
- Addressing an in-depth testing of the application to make a robust and reliable version.

v2.6.0

No due date 0% complete

<input type="checkbox"/>	<input checked="" type="radio"/> 18 Open <input type="radio"/> 0 Closed	
<input type="checkbox"/>	<input checked="" type="radio"/> Cache - Feasibility study to improve caching performance ready for testing Type: Enhancement	
<input type="checkbox"/>	<input checked="" type="radio"/> Retired status is visible on front-end without being published Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Bulk import - Add a message when trying to import an item that already exists ready for testing Type: Enhancement under analysis	
<input type="checkbox"/>	<input checked="" type="radio"/> On administration side, a database error is displayed and the "Available items" table is not displayed ready for testing Type: Bug under analysis	
<input type="checkbox"/>	<input checked="" type="radio"/> Change page icons (Favicon) to point to our own repository and images Type: Enhancement	
<input type="checkbox"/>	<input checked="" type="radio"/> When publishing an item, send an email to all those who have participated in the process. ready for testing Type: Enhancement	
<input type="checkbox"/>	<input checked="" type="radio"/> Make the version of the software a property to ease its change each release ready for testing Type: Enhancement	
<input type="checkbox"/>	<input checked="" type="radio"/> Make hyper linkable the group values ready for testing Type: Enhancement	
<input type="checkbox"/>	<input checked="" type="radio"/> Bulk Edit - It is not possible to update an empty RelationReference type field ready for testing Type: Bug	
<input type="checkbox"/>	<input checked="" type="radio"/> Simplified workflow - The submit button should not be available Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Investigate why sometimes empty fields are displayed in the front end. Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Bulk edit - Attempting to edit an item that does not exist in that language. Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Bulk edit- Attempting to edit an item that is in status draft Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Dropdown Overlay -- 'Add Field' page Type: Bug under analysis	
<input type="checkbox"/>	<input checked="" type="radio"/> Show the last modification date attribute Type: Enhancement under analysis	
<input type="checkbox"/>	<input checked="" type="radio"/> Tooltips not working -- "Structure dashboard" and "Content" pages Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Wrong error message displayed - 'Add a content class' page Type: Bug under development	
<input type="checkbox"/>	<input checked="" type="radio"/> Wrong URL when trying to delete a class in the 'Manage the structure' page Type: Bug under development	

Re3gistry and INSPIRE Registry Surveys

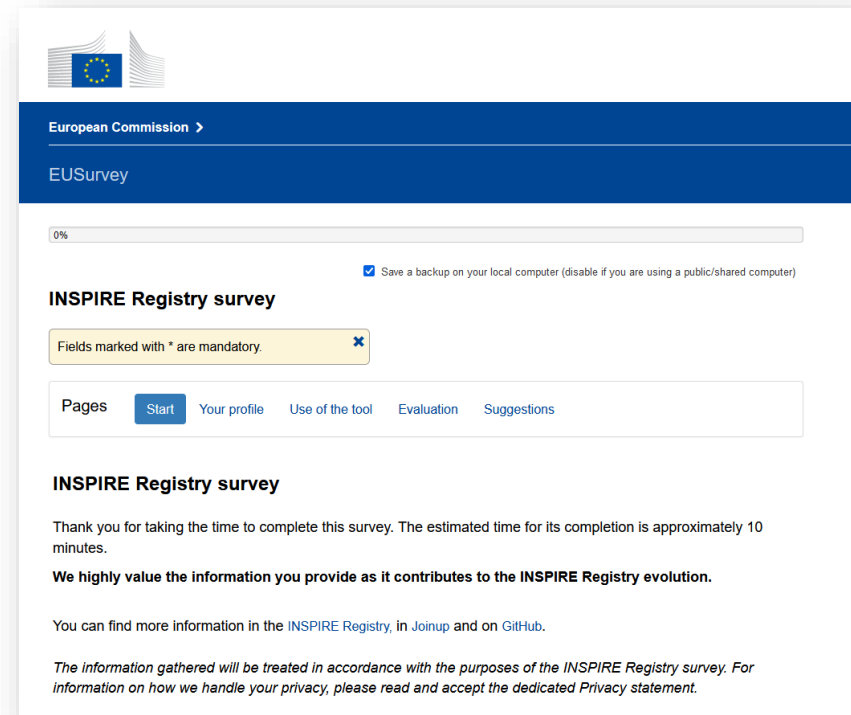
- Take part in our surveys !!



The screenshot shows the 'Re3gistry survey' page. At the top, there's a European Commission logo and a progress bar at 25%. Below the header, a message states 'Fields marked with * are mandatory.' A navigation bar includes 'Pages' and buttons for 'Start', 'General', 'Rating', 'Outreach', and 'Closure'. The main content area features the 'Re3gistry' logo and a section titled 'Re3gistry software survey'. The text in this section thanks the user for completing the survey, estimates the completion time at 10-15 minutes, and emphasizes the value of the information provided for the Re3gistry software evolution. It also provides links to Joinup and GitHub for more information and mentions a dedicated Privacy statement.

Re3gistry software

https://ec.europa.eu/eusurvey/runner/Re3gistry_Survey



The screenshot shows the 'INSPIRE Registry survey' page. At the top, there's a European Commission logo and a progress bar at 0%. Below the header, a checkbox option is available: 'Save a backup on your local computer (disable if you are using a public/shared computer)'. A message states 'Fields marked with * are mandatory.' A navigation bar includes 'Pages' and buttons for 'Start', 'Your profile', 'Use of the tool', 'Evaluation', and 'Suggestions'. The main content area features a section titled 'INSPIRE Registry survey'. The text in this section thanks the user for completing the survey, estimates the completion time at approximately 10 minutes, and emphasizes the value of the information provided for the INSPIRE Registry evolution. It also provides links to the INSPIRE Registry, Joinup, and GitHub for more information and mentions a dedicated Privacy statement.

INSPIRE Registry

https://ec.europa.eu/eusurvey/runner/INSPIRE_Registry_Survey

Community & Communication channels

- GitHub - [Re3gistry Helpdesk](#)
[INSPIRE Registry Helpdesk](#)
- Re3gistry last news - [Join up](#)
- OSGeoLive 16 - [Re3gistry software](#)
- Re3gistry - [Promotional video](#)



Demonstrations today

- **9:50 - Part 1. Getting started with the Re3gistry**
 - Installation
 - Description of the application
 - Creation of content & Data governance
- **10:30 - Q&A session**
- 10:45 - Coffee break ☕
- **11:00 - Part 2. The Re3gistry in detail**
 - Specific Re3gistry features
 - Frontend & Data consumption
- 12:10 - Re3gistry Starter Kit
- **12:15 - Q&A session**

Thank you!



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@JordiEscriu



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