

Re3gistry version 2

Manage and share reference codes in a simple way

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6 December 2017



ELISE

ELISE is the
European Location Interoperability Solutions for eGovernment.

ISA² Action 10

Why do we need reference codes?

Text fields:

Same concepts

Different
representations



Country: **Italia**
Theme: **Suolo**



Country: **Deutschland**
Theme: **Boden**



Country: **Ελλάδα**
Theme: **έδαφος**



Country: **DE**
Theme: **Boden**





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Why do we need reference codes?

Reference codes:

Same concepts

Same
representations



Country: **countryCode/it**
Theme: **theme/so**



Country: **countryCode/de**
Theme: **theme/so**



Country: **countryCode/el**
Theme: **theme/so**



Country: **countryCode/de**
Theme: **theme/so**



<http://inspire.ec.europa.eu/theme/so>

Managing reference codes

- **Registry:** information system on which reference codes are maintained
- **Register:** set of files containing identifiers assigned to items with descriptions of the associated items
- Main operations
 - Create
 - Store/serve
 - Update
 - Clarification
 - Supersession
 - Invalidation
 - Retirement



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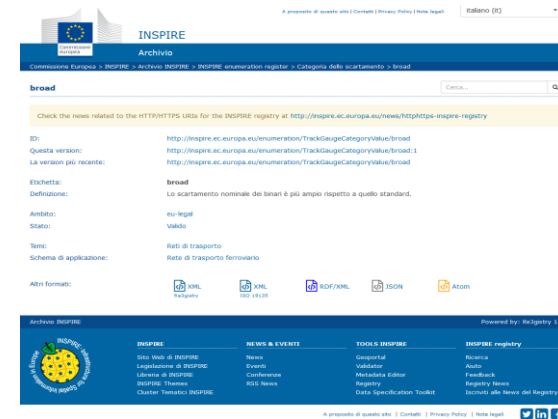
Why do we need registries in INSPIRE?

Key infrastructure components to

- allow unambiguous references to items
- provide unique and persistent identifiers for resources
- allow their consistent management and versioning

Central INSPIRE registry contains registers for

- Themes
- Code lists and values
- Enumerations and values
- Feature concepts
- Metadata code lists and values
- Application schemas
- Glossary
- Reference documents
- Layers
- Media types





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Central register federation

- Distributed federation of registers related to the INSPIRE Directive
- Central access point: Register of Registers

<http://inspire-regadmin.jrc.ec.europa.eu/ror/>

The screenshot shows the INSPIRE Register Federation web application. At the top, there's a header with the European Commission logo and the text 'INSPIRE Register Federation'. Below this is a breadcrumb trail: 'European Commission > INSPIRE > Register Federation > Registries'. A navigation bar contains links for 'Registries', 'Registers', 'Relations', 'Federated search', and 'Help', along with a 'Login' button. The main section is titled 'Registries' and contains a table with three columns: 'Filter Label', 'Filter Publisher', and 'Filter URI'. The table lists several registries, including the INSPIRE registry, Spanish Registry, EEA Data Dictionary, Lithological Classification Austria, Austrian INSPIRE registry, and IUGS CGI Geoscience Vocabularies. At the bottom, there's a pagination control showing '10' items per page and 'Showing 1 to 6 of 6 entries'. A REST URL is displayed at the bottom: 'http://inspire-regadmin.jrc.ec.europa.eu/ror/rest/registries', with a link to 'Web Service details'.

Filter Label	Filter Publisher	Filter URI
Label	Publisher	URI
INSPIRE registry	European Commission, Joint Research Centre	https://inspire.ec.europa.eu/registry
Spanish Registry - Test version	Instituto Geográfico Nacional	http://www.idee.es/register-inspire
EEA Data Dictionary vocabularies	European Environment Agency	http://dd.eionet.europa.eu/vocabularies
Lithological Classification Austria - extended values	Geological Survey of Austria	http://resource.geolba.ac.at/lithology/0
Austrian INSPIRE registry	CCCA Data Centre	http://registry.inspire.gv.at
IUGS CGI Geoscience Vocabularies for Linked Data	Geoscience Terminology Working Group (GTWG)	http://resource.geosciml.org/

Items per page: 10 Showing 1 to 6 of 6 entries

REST URL: <http://inspire-regadmin.jrc.ec.europa.eu/ror/rest/registries> Web Service details

ISO 19135 workflow

Submitting organizations

<https://ies-svn.jrc.ec.europa.eu/issues/2911>

Control Body

<https://ies-svn.jrc.ec.europa.eu/issues/2910>



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Re3gistry Software

An open source solution for managing and sharing reference codes

ARe³NA

ISA Action 1.17

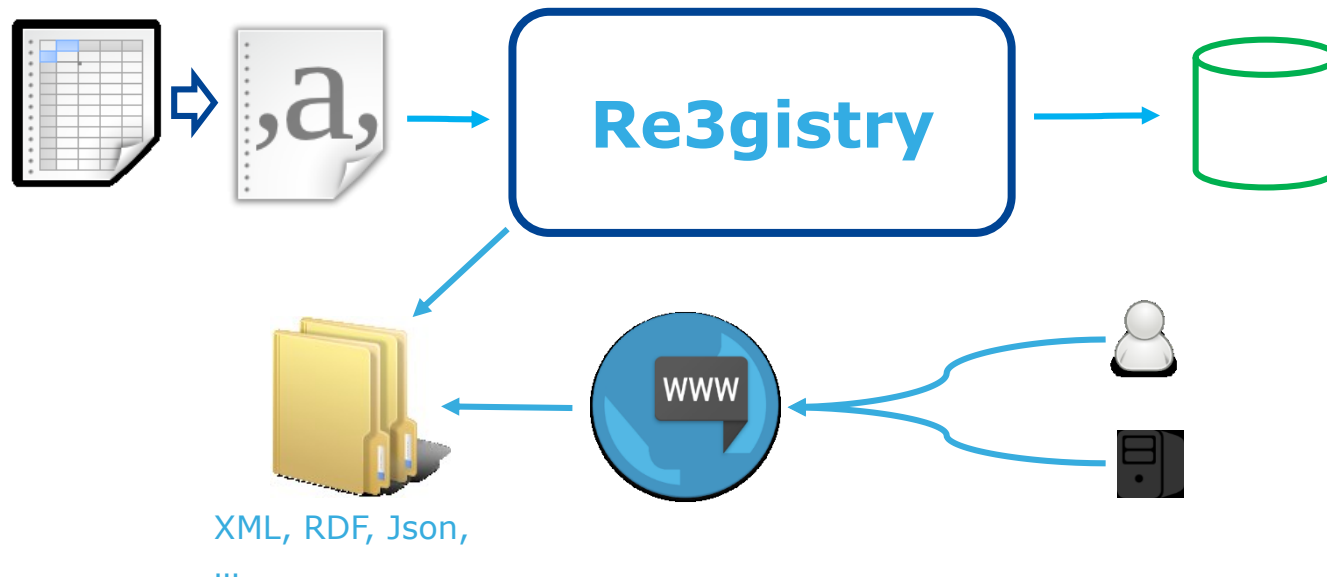


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Re3gistry Software v1.3.1



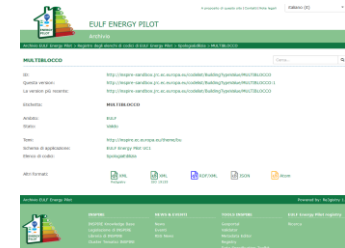
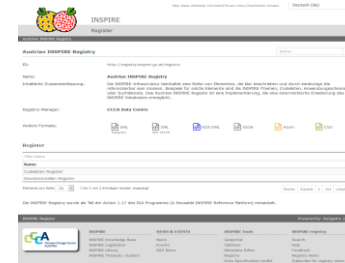


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Re3gistry Software reuse

- INSPIRE registry service
- Slovakian registry
- Austrian (CCCA) registry
- Italian (AgID) registry
- Finnish registry
- Macedonian registry
- GeoSmartCity registry
- SEMIC Core Vocabularies registry
- SEMIC EU Budget Vocabulary
- ELISE Energy Pilot registry

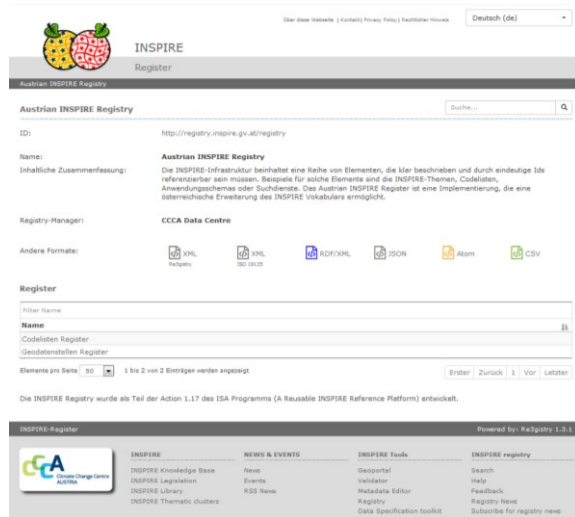
Joint
Research
Centre





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Austrian INSPIRE Registry – CCCA Data Centre



Reuse experience [v1.2 & v1.3]

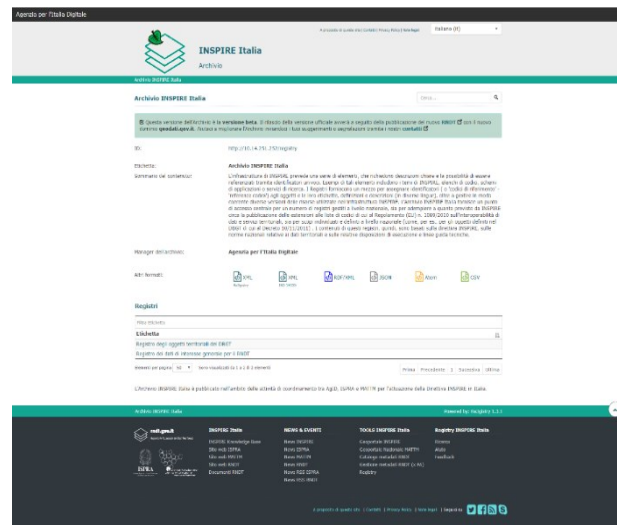
- code list register, no issues for adding and maintaining the content
- Resolve issues with “Austrian data provider register” – not a code list, a new register item
 - digits as label not accepted “0115”
 - strong JRC support, **v1.3.1** is running
- Data import module, needs experience to apply the correct order
 - Addition, Clarification, Retirement
 - Retirement (recursive – children items) not always comprehensible
- Data import difficult & complex, but designed by purpose

<http://registry.inspire.gv.at>

contact: chris.schubert@ccca.ac.at



INSPIRE Italia Registry (Agenzia per l'Italia Digitale - AgID)



Reuse experience

- Easy implementation thanks to detailed software documentation and to prompt support from the JRC team.
- Provided feedback to improve the application, as e.g.:
 - support to numeric ID (included in the version 1.3.1);
 - management of 2+ hierarchical levels in the registers.
- Customisation of the interface to comply with Italian guidelines on design.
- Registry published under the coordination activities carried out by AgID, ISPRA and Ministry of the Environment.

The beta version will be on line at the end of September at the URL <http://www.registry-inspire.rndt.gov.it>

Re3gistry version 2

User feedback



Registry survey



- Backward compatibility with Re3gistry \geq v1
- User friendly editing interface
- ISO 19135 workflow
- Better handling of the service (Solr instead of static files)
- API (direct calls)
- Simple software installation (also via Docker)

Backward compatibility with Re3gistry ≥ 1

Database address:

Database port:

Database name:

Database username:

Database password:

**Re3gistry
V.1.x**



**Migration
tool**



**Re3gistry
V.2**



User friendly editing interface

- Create, edit, update registers, items, fields
- Handle localization of each field and the related field's label
- Manage the ISO 19135 workflow in a visual way
- Manage users, roles and groups




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English (en)

Screenshot



RE3GISTRY 2

Reference codes management tool

European Commission > Re3gistry 2

[Home page](#) [Content](#) [Itemclasses & Fields](#) [Workflow](#) [Logout](#)

Manage the content

en

it

cs

bg

da

de

el

es

et

fi

fr

hu

lt

lv

mt

pl

nl

pt

ro

sk

sl

sv

hr

URI

http://inspire.ec.europa.eu/theme

Label

INSPIRE theme register

Content summary

The INSPIRE theme register contains all spatial data themes, as defined in the Annexes of the INSPIRE Directive (Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE)). The descriptions of the themes

Registry

[INSPIRE registry](#)

Register manager

European Commission, Joint Research Centre

Register owner

European Union

Control body

INSPIRE Maintenance and Implementation Group (MIG)

Submitting organizations

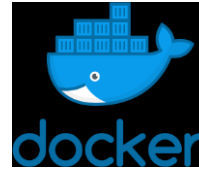
Members of INSPIRE Maintenance and Implementation Group (MIG)



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User friendly installation

- Install wizard
- Automatic initialization
- Option to install the system using





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Extensibility

- Adapt your model with any custom fields you need

Manage the fields

Showing fields for item class: metadata-codelist (register)

List order	Label	Type	Href	Hidden	Multivalued	Required	Table visible	Actions
40	Label	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Un-map field
41	Content summary	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Un-map field
42	Registry	registry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Un-map field
43	Register manager	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field
44	Register owner	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field
45	Control body	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field
46	Submitting organizations	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field
47	Contact point	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field
48	License	String	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Un-map field

- Easily adapt the service User interface to fit your branding
- Create your own persistence driver by just implementing the described interfaces

Other important features

- New Apache Solr™ based service handling (no more static files export)
- Restful API
- ISO 19135 Workflow





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Re3gistry version 2 – Development status

- ✓ New architecture
- ✓ Definition of roles and workflows
- ✓ Database
- Migration
- Editing interface
- APIs
 - Solr handler
 - Service frontend



... available soon ...

Late spring 2018

Follow us:

<https://ies-svn.jrc.ec.europa.eu/projects/inspire-registry/news>

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



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Thank you

Questions?

Contact us at
inspire-registry-dev@jrc.ec.europa.eu

Re3gistry Survey:
we need your
feedback!



<http://europa.eu/!Bn84Ct>