INSPIRE Geoportal – Status and future work
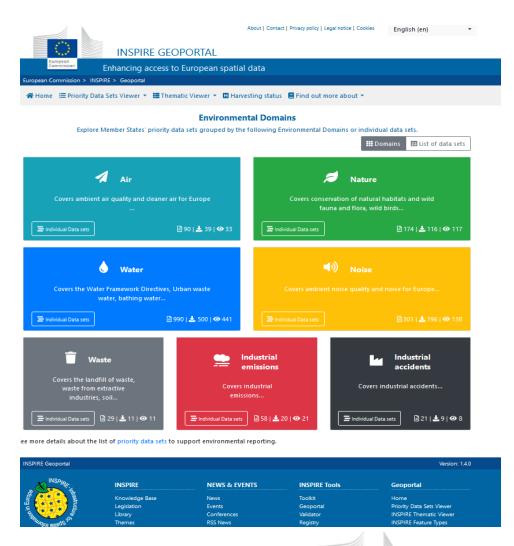
JRC INSPIRE Team

63rd MIG-T meeting – October 13-14, 2020

Current activities: September v.1.4.0 release

- Added full support for MD TG 2.0

- Added several improvements & bugfixes

- New dashboard for the Monitoring and Reporting 2020 indicators

INSPIRE Geoportal vs. Reference Validator

- Both the INSPIRE Reference Validator and the INSPIRE Geoportal have been updated to support metadata encoded according to TG 2.0.

- The INSPIRE Reference Validator is meant to check and validate metadata against the TG 2.0 requirements. It is the tool that will be used during the Monitoring and Reporting 2020 activity to calculate the indicators MDi1.1 and MDi1.2.

- The INSPIRE Geoportal is harvesting all the metadata, even if they are not compliant with TG 2.0. Therefore, the Geoportal is as flexible as possible and (whenever possible) find and display all the harvested metadata.

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Testing period (open until 23rd of October)

- Until now there has been a good involvement of Member States in the Geoportal testbed.

- Already fixed:

  - Resolved the issues on the keyword reported in #3877, #3879, #3880.

  - Resolved the issues on the "Service metadata date origin" reported in #3882.

  - *Harvest console:* in Report page, added a new column with file id of missing downloadable/viewable resources

- 15+ issues reported / questions asked since the September release

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Future activities

- The current priorities for the evolution of the INSPIRE Geoportal are:

    - improvement of the harvesting system very high priority

    - simplification of data-service linking approach high priority

European Commission › ... › Action 2019.2: Improving accessibility of data sets through network services

Simplification of data-service linkages

Improvement of the harvesting system

- The INSPIRE Geoportal (backend) is a highly customized system:

  - code is often difficult to understand, hard to maintain/extend

  - cannot be integrated with other existing tools/modules

  - overall maintenance & operation is expensive

- Sustainability of INSPIRE core infrastructure components:

  - main idea is to reduce day-to-day operation while retaining control on evolution, (also) through partnerships with relevant stakeholders & communities

  - for the Geoportal:

    - future role as INSPIRE monitoring component

    - limited addition of new features (except an API and related OpenAPI documentation)

    - migration to a cloud environment, backend based on GeoNetwork

Why GeoNetwork?

- GeoNetwork is a reference catalogue application within INSPIRE:
    - used by 24 Member States & EFTA countries
    - used by the EEA and the European Commission (e.g. ESTAT)
- GeoNetwork is open source (under the GPL) & is an OSGeo project
    - code maturity, large base of users & developers
    - development is led by Camptocamp, GeoCat & Titellus
    - current stable version is v. 3.10, next version is v. 4 (alpha version available)
        - main improvement (funded by the EEA) is on search – Elasticsearch replacing home-made search based on Lucene

- Where we are:
    - spring 2020: first (positive) assessment ✅
    - summer/autumn 2020: assessment of the future v.4
    - winter 2020/2021: migration

Feasibility assessment on a possible migration of the Geoportal to GeoNetwork

- Performed by GeoCat in April/May 2020, includes:
    - requirements of the INSPIRE Geoportal
    - gap analysis between the INSPIRE Geoportal and GeoNetwork
    - proposal of an alternative GeoNetwork-based setup of the Geoportal + demo

- Conclusions:
    - results are positive and suggest that integration is possible
    - some limitations emerged, e.g. impossibility to use OR and NOT conditions in OGC filters
    - some doubts remain about the performance in managing big catalogues
    - further test/work is necessary before the Geoportal migration

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Test on GeoNetwork 4.0 alpha

- Performed internally by the JRC INSPIRE team:
  - installed using the Docker container provided directly by GeoNetwork
  - sample used for the test: both big and small catalogues
    - Greece
    - Germany
    - France
    - Poland
    - Italy

- Some problems were found when working with the different implementation (e.g. the distributed approach of Poland).

Test on GeoNetwork 4.0 alpha

- Meeting with GeoNetwork developers to report the outcome of our internal test and to provide feedback (end of July).

- Some misconfiguration errors solved with their help.

Outcome

- During the meeting it was highlighted that the harvester of GeoNetwork v.4 is similar to the current one of v.3. The improvements are mostly on the search experience.

- An improvement could be to develop a new GeoNetwork harvesting module for a micro-service approach, which was also presented in the GeoNetwork user meeting 2020.

  https://geonetwork-opensource.org/usermeeting2020.html

Data-service linkage simplification

- The activity has still a high priority:

    - however, the migration to a GeoNetwork-based system shall be performed first

    - therefore, no change in the current INSPIRE Geoportal will be made before the migration

- The first step (to be made in parallel) is to reach an agreement on a common simplified approach – not yet done in 2019, given the high diversity of approaches proposed by Member States.

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Thank you!

Keep in touch

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