MIWP Action 1.1 - Towards a digital ecosystem for the environment and sustainability

68th MIG-T meeting, 4 February 2022

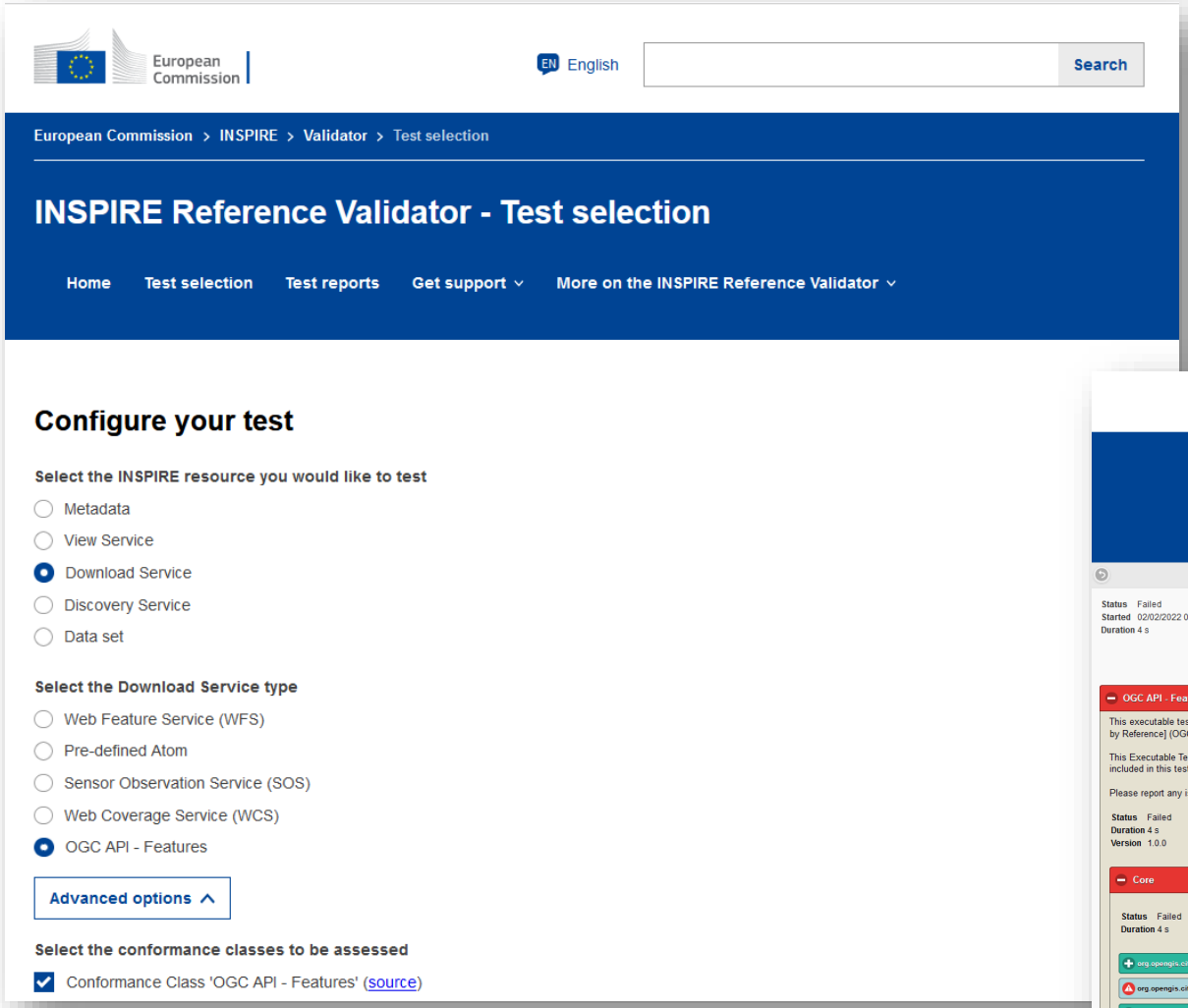
Structure

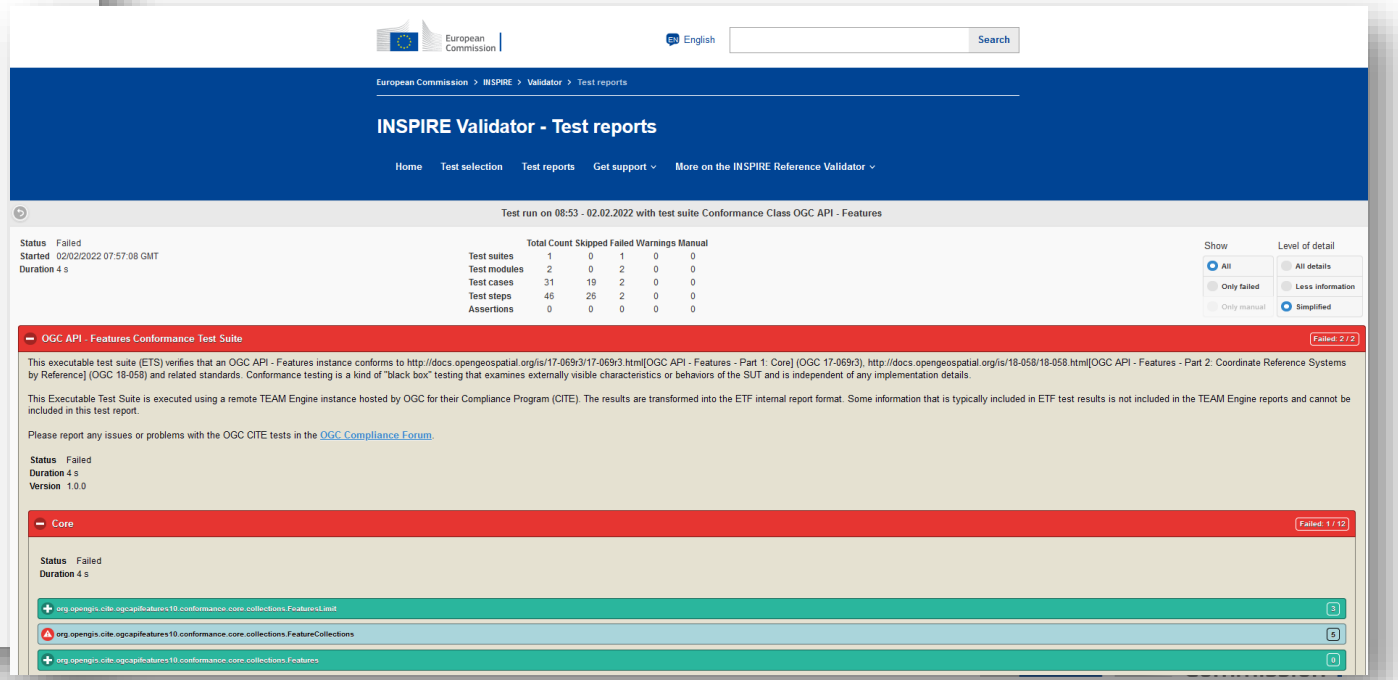
1) INSPIRE Good Practices – status update
2) Emerging approaches for data sharing in Europe
3) JRC Science for Policy report
4) Conceptual integration of INSPIRE datasets and services with GAIA-X

Good Practices

Validation of OGC API-Features instances

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





Initiated good practices

1) Building one access point to dispersed data sources

2)Making spatial data downloadable via WMS services

- **What is new?**
  - Extensive documentation for reproducibility with different solutions released on GitHub
  - **Webinar: Pushing WMS services to their limits - Smart solutions as candidate INSPIRE Good Practices,** Tuesday, February 8, 2022 - 14:00 to 15:30

https://inspire.ec.europa.eu/events/webinar-pushing-wms-services-their-limits-smart-solutions-candidate-inspire-good-practices

GeoPackage

For information (from the EEA END reporting activities):

GP proposal: GPKG alternative encoding of INSPIRE data

- By the end of February final draft of the **UML to GeoPackage encoding guidelines** will be shared in the INSPIRE-MIF/gp-geopackage-encodings GitHub repository for discussion.
- Strategic Noise Maps (reporting due by 31/12/2022) will be delivered according to INSPIRE-based data model and in **END GeoPackage format,** following the guidelines developed for that purpose.

Documentation available at: https://www.eionet.europa.eu/reportnet/docs/noise

STAC in INSPIRE?

STAC
SpatioTemporal
Asset Catalog

- Standardized way to expose collections of spatial temporal data
- Data are considered as assets, e.g.
  - Point clouds, data cubes, multispectral imagery, videos, etc.
- STAC facilitates indexing and discoverability
- Encoded as JSON

Multiple STAC implementations are available

STAC users

https://stacspec.org

STAC in INSPIRE?

- STAC in INSPIRE?
  - A possible INSPIRE approach for implementing a predefined access download service

  Activities:

    - Mapping between the NS Regulation operations and the STAC Specifications
    - Collection of use cases and implementations

    - Let us know if you are interested in working on a GP!

Emerging Approaches for Data-driven Innovation in Europe

Sandbox experiments on the governance of data and technologies

Pool of experts

European Commission

Results

- JRC Technical Report
- GitHub repositories with data and code

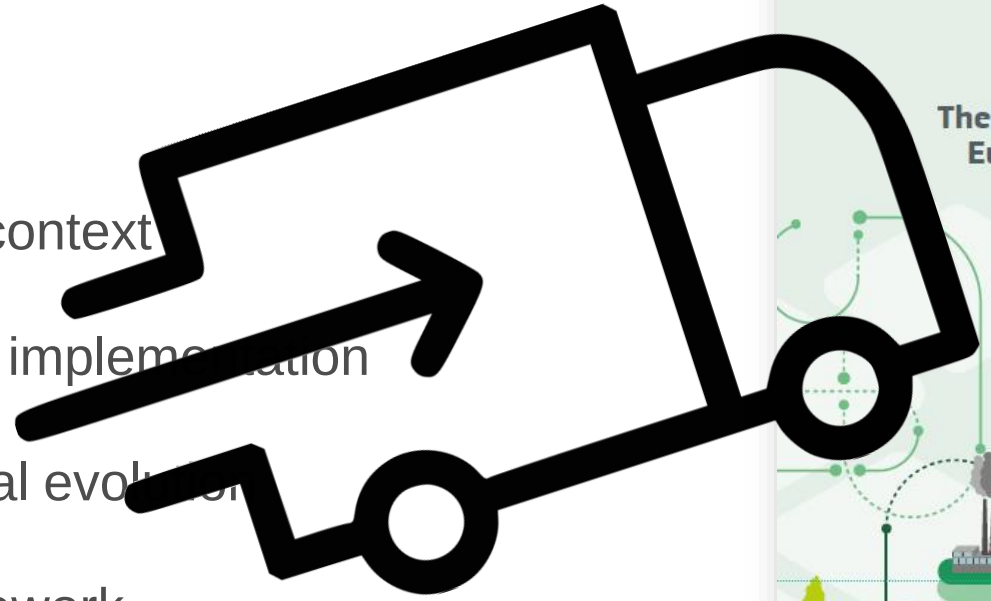
https://publications.jrc.ec.europa.eu/repository/handle/JRC127730

INSPIRE – A public contribution to the European Green Deal Data Space

JRC Science for Policy Report

JRC Science for Policy Report

- Contents
  - State of play
  - Policy and technological context
  - Lessons learned from the implementation
  - Vision for the technological evolution
  - Prototype reference framework
  - Actions and roadmap



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

Conceptual integration of INSPIRE datasets and services with GAIA-X

GAIA-X and INSPIRE

Implemented with Fraunhofer IOSB

Objective: Hands-on evaluation of the GAIA-X architecture in the context of a relevant INSPIRE use case

Tasks:

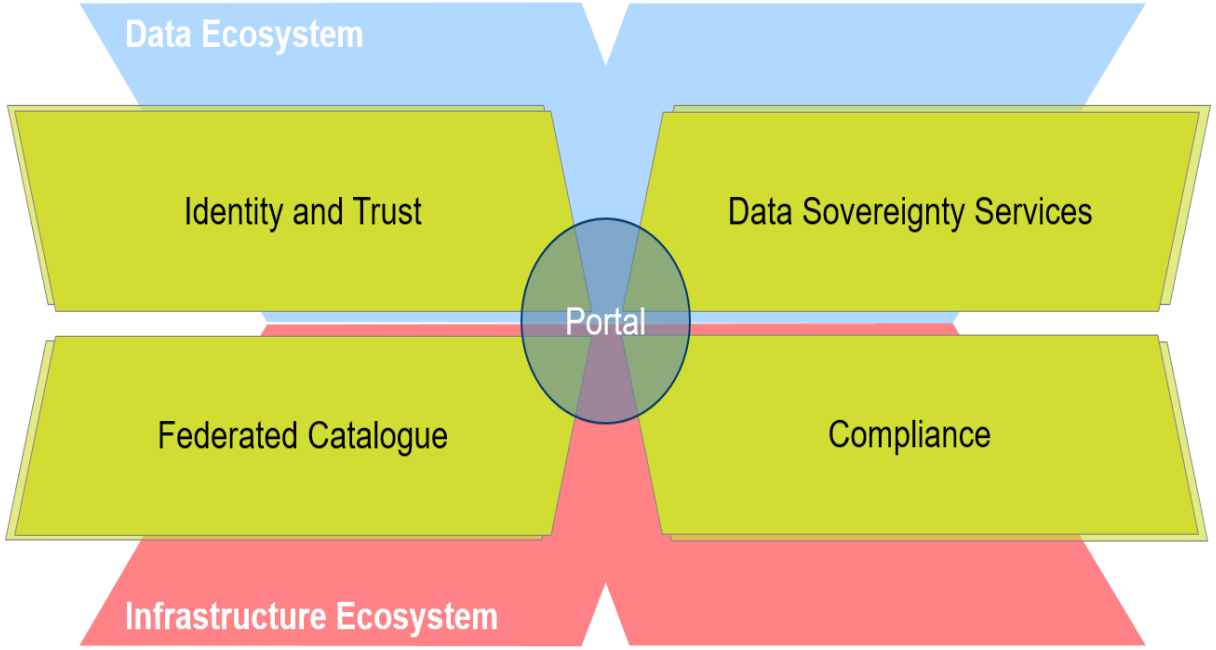
1) Shortlist and prioritise INSPIRE use cases, incl. the necessary datasets and services
2) Mandatory and optional steps for implementing the selected use case
3) Conceptual implementation, incl. the necessary artefacts
4) Summary of the activities and steps towards a prototypical implementation
5) Webinar

Identified use cases

- API4INSPIRE project
  - Cross-border (FR, DE) and cross-domain datasets in the Rhine watershed
  - Smart Transport in the city of Hamburg
- GeoE3 CEF project
  - Optimising the heating and cooling system of a buildings
  - Analysing the efficiency of expansion of urban land
  - Co-operative Intelligent Transport Systems

Possible benefits for INSPIRE

- **Identity and trust → Authenticity of INSPIRE Data**
  - Is the publisher valid and the self-description (SD) truthful?
  - Is the SD published by the publisher?
- **Federated Catalogue**
  - Offer INSPIRE data within GAIA-X
  - Finding data & publishers
- **Compliance**
  - Gaia-X rules
  - Is the self-description valid
  - Is the self-description correct
- **Data Sovereignty**
  - Is data used according to the license
  - Compute-to-Data



European Commission

Thank you

European Commission