Modernisation of INSPIRE

- 2021 JRC outlook on how to modernise INSPIRE from the organisational and technological perspectives, by:
  - reflecting on lessons learnt from the first 15 years of implementation
  - assessing the new political and technological context
    - Green Deal & data spaces
    - disruptive technological trends around (geo)data
  - developing a vision for the future and actions to achieve it

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

JRC SCIENCE FOR POLICY REPORT

INSPIRE • A Public Sector Contribution to the European Green Deal Data Space
A vision for the technological evolution of Europe's Spatial Data Infrastructures for 2030

Alexander Kotsev, Marco Minghini, Vlado Cetl,
Frisa Penninga, Joeri Robbrecht, Michael Lutz

EUR 30032 EN

The possible future of INSPIRE

- Data sharing is not a goal in itself. To remain fit for purpose, INSPIRE should support data-driven decision-making and innovation.

- To be sustainable, 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.

European Commission

Actions

- Legal:

1. Avoid overspecification in legislation

2. Use a simple licensing framework

- Organisational:

1. Embrace co-design by default

2. Rethink the existing governance structures

3. Adopt an ecosystem approach

- Technological:

1. Continue to improve the discoverability and accessibility of data

2. Ensure neutrality and embrace well-adopted standards and technologies

3. Avoid custom extensions

4. Embrace well-documented, standard-based APIs

5. Optimise data for search engines

6. Leverage on the developments of federated European cloud infrastructure

European Commission

INSPIRE Good Practices

WHY • Introduced to modernise and add value to the infrastructure

WHAT • Leverage
- new technologies, standards & approaches for making (meta)data FAIRer
- experiences gained from implementations

WHO • Based on an agile process:
- community-initiated/driven
- using online collaborative platforms

HOW • According to a step-wise procedure:
1. initiation
2. submission as good practice candidate
3. outreach
4. submission as a good practice
5. legal scrutiny
6. feedback

European Commission

INSPIRE Good Practices

Candidate

[GeoJSON encoding of INSPIRE Datasets](#)

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](#)

[Building one access point to dispersed data sources](#)

[Making spatial data downloadable via WMS services](#)

[OGC compliant INSPIRE Coverage data and service implementation](#)

[GeoPackage encoding of INSPIRE datasets](#)

[Data-Service Linking Simplification](#)

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

European Commission

INSPIRE Good Practices – F

Candidate

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FINDABILITY

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FINDABILITY
ACCESSIBILITY

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European Commission

INSPIRE Good Practices – FAI

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FINDABILITY
ACCESSIBILITY
INTEROPERABILITY

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European Commission

INSPIRE Good Practices – FAIR

Candidate

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FINDABILITY
ACCESSIBILITY
INTEROPERABILITY
REUSABILITY

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Implementing Act on high-value datasets

- High-value datasets in 3 out of the 6 categories are in scope of INSPIRE.
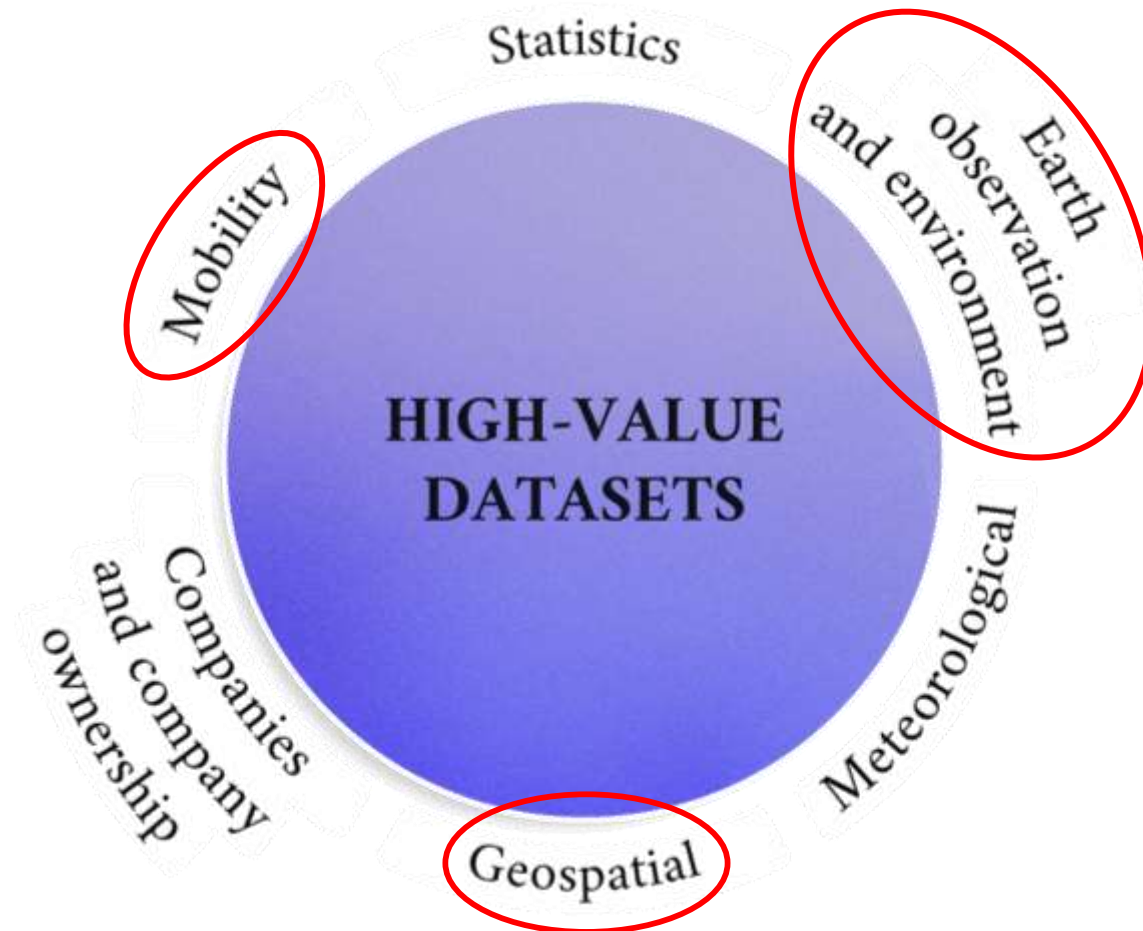
Implementing Act on high-value datasets

- High-value datasets in 3 out of the 6 categories are in scope of INSPIRE.

- INSPIRE Good Practices strongly support implementation!

1.2. Arrangements for the publication and re-use

a) The datasets shall be made available for re-use:

  – under the conditions of the Creative Commons BY 4.0 licence or any equivalent or less restrictive open licence;
  – in a publicly documented, Union or internationally recognised open, machine-readable format;
  – through application programming interfaces ('APIs')[11] and bulk download;
  – in their most up-to-date version.

data encodings

OGC W*S & standards-based APIs

b) The metadata describing the datasets within the scope of the INSPIRE data themes shall contain at least the metadata elements set out in Commission Regulation (EC) No 1205/2008.[12]

metadata formats

European Commission

Thank you!

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Keep in touch

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