



ISO/TC211 Input to EU Data Spaces

ISO-TC211/EC-JRC/EuroGeographics
webinar on Data Spaces

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Common European data spaces



Rich pool of data
(varying degree of
accessibility)

Free flow of data
across sectors and
countries

Full respect of GDPR

Horizontal
framework for data
governance and data
access



Health



Industrial &
Manufacturing



Agriculture



Finance



Mobility



Green Deal



Energy



Public
Administration



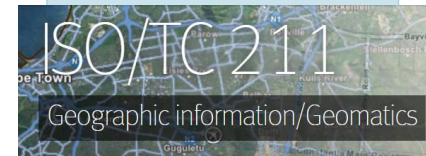
Skills

- Technical tools for data pooling and sharing
- Standards & interoperability (technical, semantic)

- Sectoral Data Governance (contracts, licenses, access rights, usage rights)
- IT capacity, including cloud storage, processing and services

Geospatial data

High-Value
Datasets



High-Value Datasets

- The EU Open Data Directive, part of the broader Digital Single Market strategy, aims to enhance the accessibility and reusability of data held by public sector bodies across the European Union.
 - A key focus of this directive is the identification and utilisation of High-Value Datasets (HVDs).
- Categories of HVDs include
 - Geospatial
 - Earth observation and environment
 - Meteorological
 - Statistics
 - Companies and company ownership
 - Mobility

High-Value Datasets - requirements

- Machine-Readable Formats
- Standardized Data Structures
- Availability via APIs
- Open Licensing - under the CC BY 4.0 license (or less restrictive)

Data Space Support Center



- Funded by the European Commission as part of the Digital Europe Program
- DSSC defines common requirements and establishes best practices to accelerate the formation of data spaces
- DSSC Building Blocks
 - Organisational and Business building blocks
 - Technical Building Blocks
- **Recommendations in the document are structurally based on DSSC Technical Building Blocks**



DATA SPACES
SUPPORT CENTRE

Data Interoperability

Data Models

Data Exchange

Provenance &
traceability

Data Sovereignty & Trust

Access & usage policies
and control

Identity Management

Trust

Data Value Creation

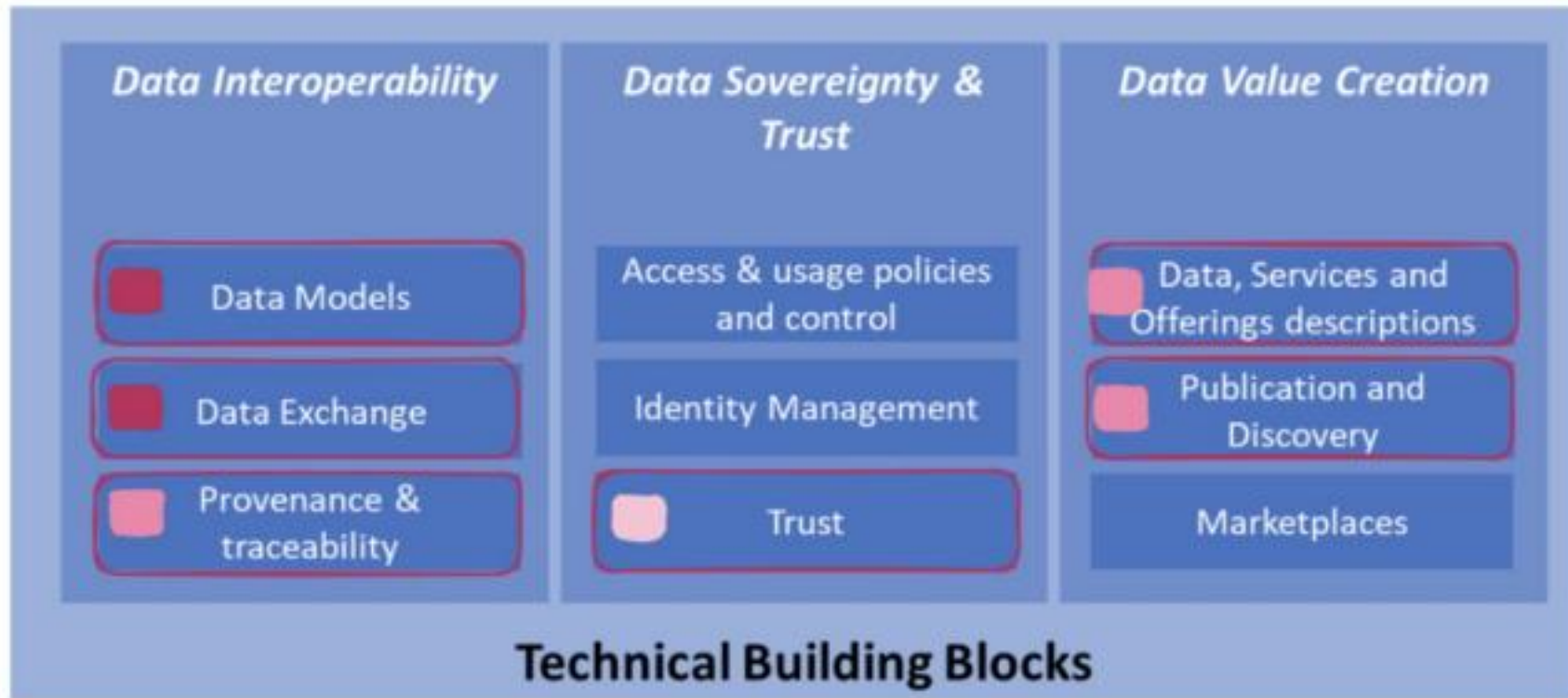
Data, Services and
Offerings descriptions

Publication and
Discovery

Marketplaces

Technical Building Blocks

Focus on Geospatial



- highly relevant towards ISO, OGC and INSPIRE
- partly relevant for ISO, OGC and INSPIRE, but able to contribute (Data Quality, Metadata, etc.)
- partly relevant but dedicated to Data Quality

ISO TC/211 AHG10

Input to EU Data spaces

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Data Interoperability

Data Models

Data Exchange

Provenance &
traceability

Geospatial

Use ISO/TC211/OGC standards
and INSPIRE good practices

Create Data Product
Specifications

Provide registers

Be model driven

Data Interoperability

Data Models

Data Exchange

Provenance &
traceability

Geospatial

Implement standardized
APIs

Use Persistent IDs (PIDs)

Use standardized formats

Data Interoperability

Data Models

Data Exchange

Provenance &
traceability

Geospatial

Data Provenance
Framework

Update your metadata

Document your pre-process
(e.g. ETL)

Use PID's

Data Sovereignty & Trust

Access & usage policies
and control

Identity Management

Trust

Geospatial

Follow common web-
standards

[GeoXACML](#)

Track your data process

Data Value Creation

Data, Services and
Offerings descriptions

Publication and
Discovery

Marketplaces

Geospatial

Provide license information

Publish your data product
specifications

Provide meaningful metadata

Data Value Creation

Data, Services and
Offerings descriptions

Publication and
Discovery

Marketplaces

Geospatial

Metadata services

Use [DCAT/GeoDCAT](#)

Use OGC/ISO APIs

Explain "Fitness for use" of
your data

Data Value Creation

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Publication and
Discovery

Marketplaces

Geospatial


Integrate with SDI's and
INSPIRE

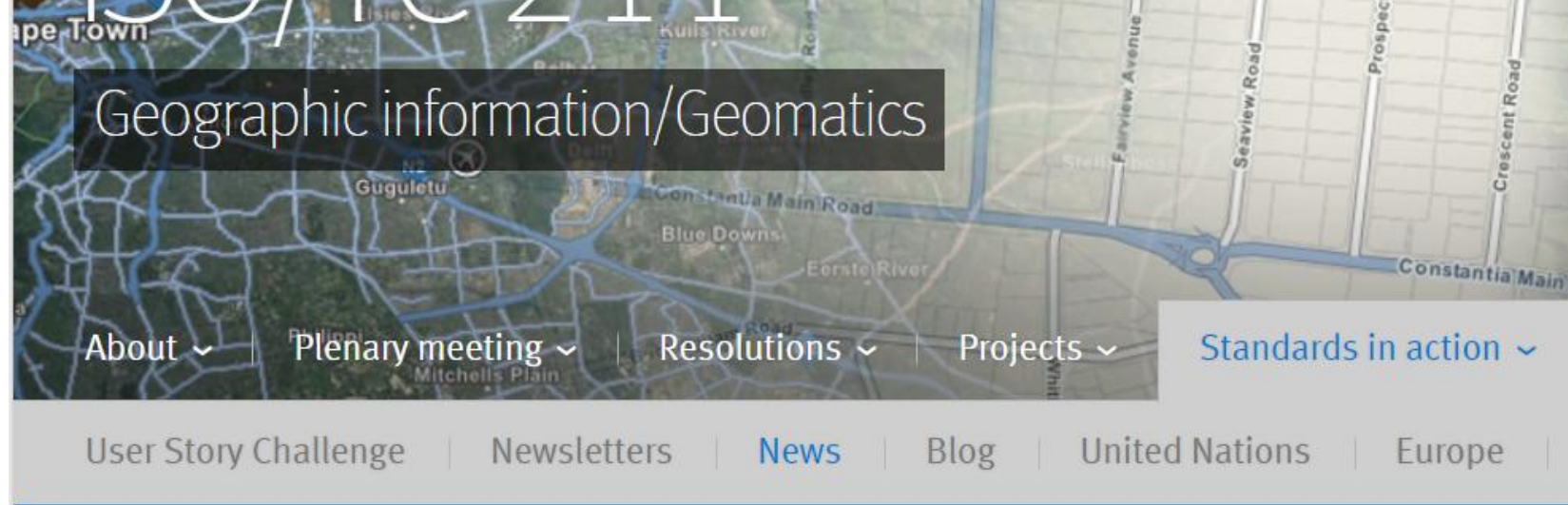
Connections with NSDIs
and EDP

Utilize standards like [DCAT-
AP/GeoDCAT](#)

Work with [intermediaries](#)

Main recommendations

- 
- 1 Use ISO/OGC/W3C standards and specifications, INSPIRE Good Practices
 - 2 Persistent unique identifiers
Metadata ISO/DCAT-AP/GeoDCAT
 - 3 Geospatial API's
 - 4 Do not re-invent the wheel



EU Data Spaces

The image is the cover of an ISO/TC211 document. On the left, the ISO logo is displayed next to the text 'ISO/TC211' and 'Geographic information/Geomatics'. The main title 'Input to EU Data Spaces' is prominently displayed in a large, bold font, with 'ISO TC 211 Document' written below it. A subtitle reads: 'A comprehensive guide to harmonizing geospatial data standards with emerging digital infrastructures'. The background features a stylized map of Europe on the left and a dynamic, abstract image of orange and yellow light trails on the right, suggesting data flow or connectivity. The overall design uses a blue and white color scheme with geometric shapes.



Geographic Information - Input to EU Data Spaces

Warning for the report

This document is not an ISO International Standard.

Acknowledgements

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AHG 10 Convenor – Jari Reini, Finland

Thank you!

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Advancing together

