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

67th MIG-T meeting, 7-8 October 2021

Structure

1) Status of INSPIRE Good Practices
2) JRC Pool of experts on data-driven innovation
3) JRC Science for Policy report
4) Conceptual integration of INSPIRE datasets and services with GAIA-X
5) Reuse of INSPIRE for the Minimal Interoperability Mechanisms (MIMs)

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Good Practices

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English (en)

INSPIRE KNOWLEDGE BASE

Search...

Infrastructure for spatial information in Europe

European Commission > INSPIRE > Toolkit > Good Practice Library

Home | Learn | Implement | Participate | Use | Toolkit

Quick search

- Data and Service Sharing
- Data Specifications
- Implement
- INSPIRE
- INSPIRE in your Country
- Learn
- Maintenance and Implementation
- Metadata
- MIG Work Programme
- Monitoring and Reporting
- Network Services
- Participate
- Spatial Data Services
- Use

Good Practice Library

Good Practice documents

Candidate	Endorsed
Building one access point to dispersed data sources	GeoDCAT-AP
Making spatial data downloadable via WMS services	SDMX for Human Health and Population Distribution
	OGC API – Features as an INSPIRE download service
	OGC SensorThings API as an INSPIRE download service
	OGC compliant INSPIRE Coverage data and service implementation

Good Practice Template

Download Template

Context

The development of INSPIRE foresaw the creation of an initial set of legally-binding Implementing Rules (IRs) and Technical Guidelines (TGs). As technology evolved since INSPIRE's creation and as experience is being gained through the implementation process, the need for new TGs emerged (e.g. for download services for observations and coverages), alongside a range of related tools that can maximise the benefits of the implementation process. These were developed in 2015 and 2016 under dedicated actions under the Maintenance and Implementation Work Programme.

At the same time, in the Thematic Clusters discussion forums, good practices for specific implementation issues (e.g. how to create persistent identifiers), opportunities offered by emerging technologies and standards (e.g. Vector Tiles, OGC SensorThings API) or extensions/profiles for specific application domains are being shared and discussed. Also, work in Member States, by solution providers or in research projects often yield interesting results that implementers in other Member States could benefit from.

Good Practices

Good practice	Status
OGC API-Features	
SensorThings API	
Coverage data and service implementation	
Building one access point to dispersed data sources	
Making spatial data downloadable via WMS services	

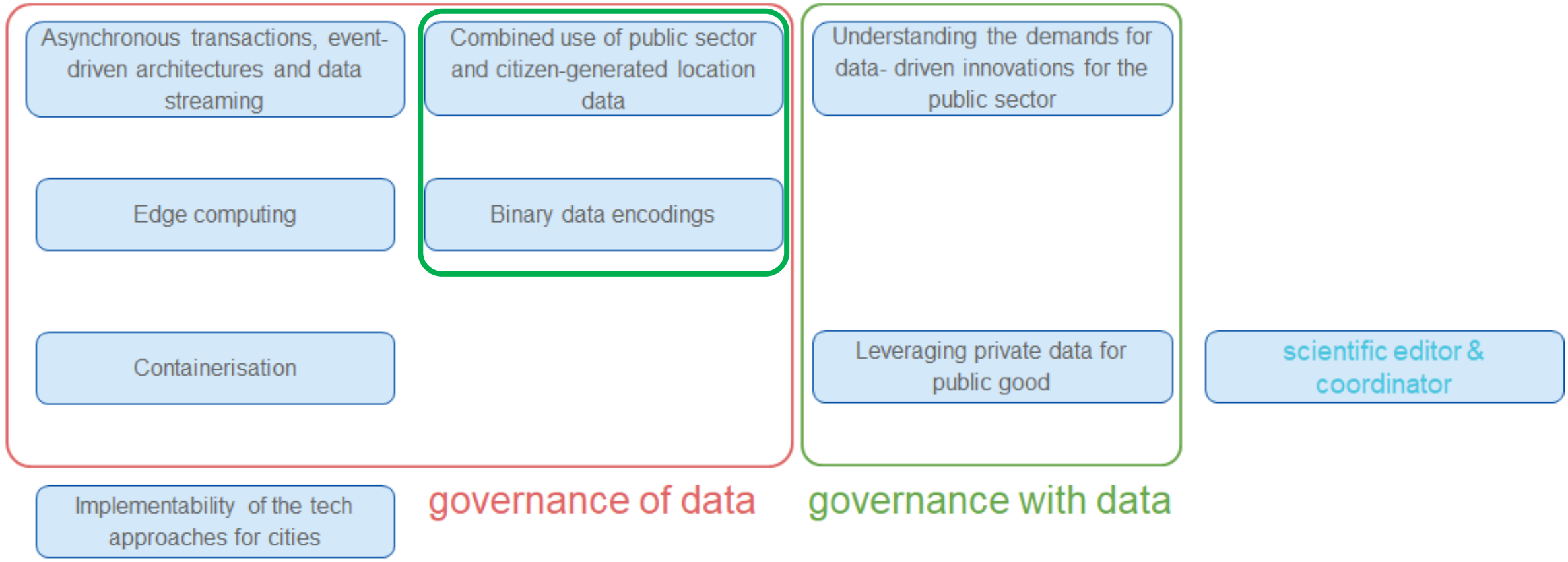
Pool of experts on data-driven innovation

Pool of experts on data-driven innovation

Pool of experts on data-driven innovation

- Context
  - Multiple emerging technological trends can help complement and/or substitute the ways in which we are sharing location information
  - Implemented within ELISE
- Topics
  - Governance of data
  - Governance with data
- Outputs
  - Based on experimentation and sandboxes
  - Summary of the experimentation in a structured manner (JRC Technical report)

Pool of experts on data-driven innovation



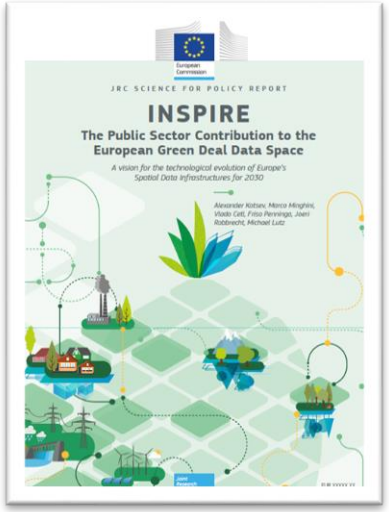
INSPIRE – A public contribution to the European Green Deal Data Space

JRC Science for Policy Report

JRC Science for Policy Report

- Prepared in collaboration with ENV and Geonovum
- Contents
  - State of play
  - Policy and technological context
  - Lessons learned from the implementation
  - Vision for the technological evolution
  - Prototype reference framework
  - Actions and roadmap

Vision (work in progress)



- 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.

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Actions (a sneak peak)

- Avoid overspecification in legislation
- Use a simple licensing framework
- Embrace co-design by default
- Rethink the existing INSPIRE governance structures

Want to know more …

THURSDAY 28/10

10:00-11:30

Modernising INSPIRE within the European Green Deal data space – a technological and organisational perspective

13:30-15:00

Data exchange and harvesting - e-Reporting and thematic portals

15:30-17:00

Smart from local to global

FRIDAY 29/10

10:00-11:30

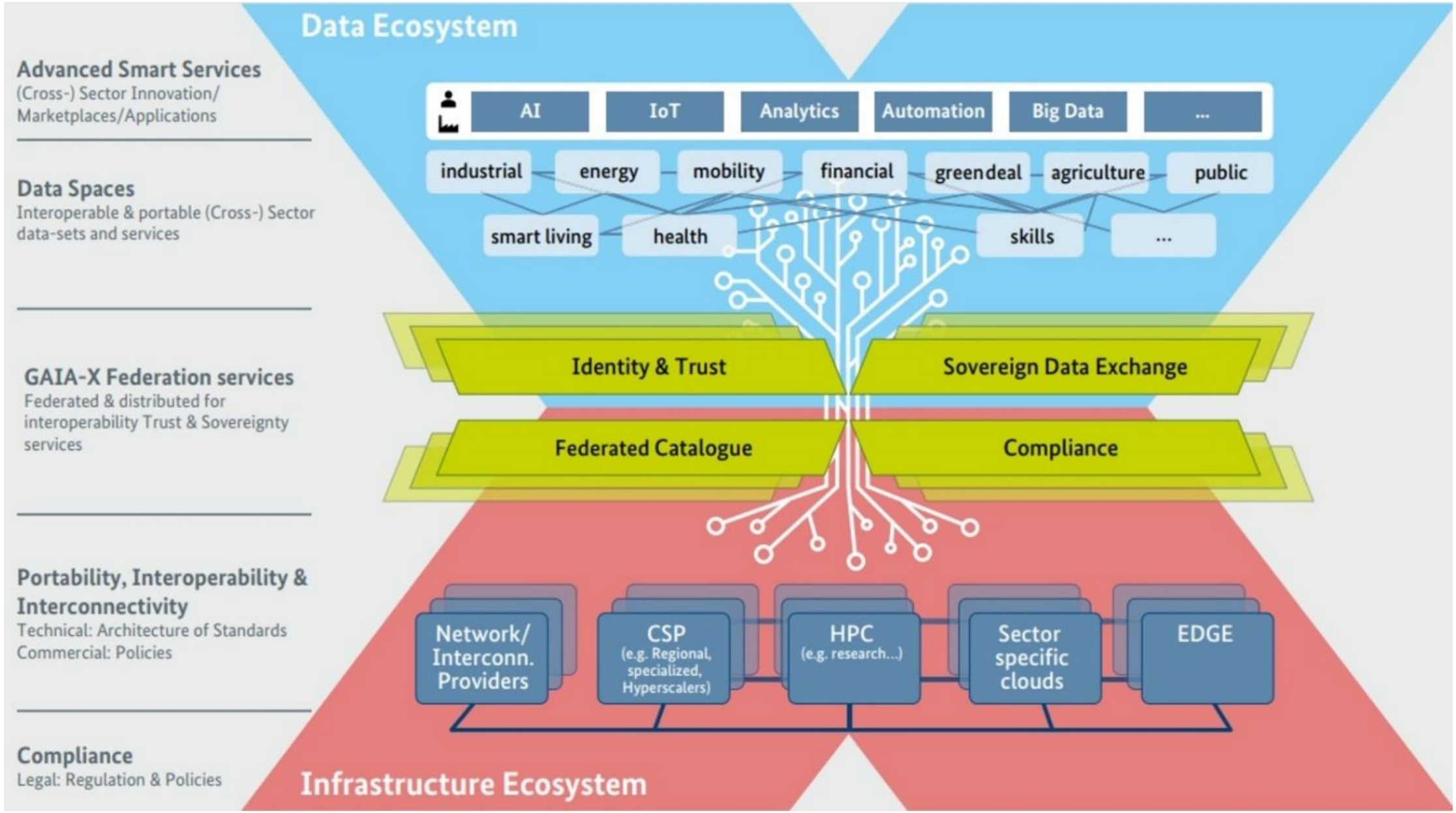
Location based data for crisis management

13:30-15:00

Closing Session - Towards a Common European Green Deal data space for environment and sustainability

Conceptual integration of INSPIRE datasets and services with GAIA-X

About GAIA-X


Data Ecosystem
Advanced Smart Services
(Cross-) Sector Innovation/
Marketplaces/Applications
AI
IoT
Analytics
Automation
Big Data
...
Data Spaces
Interoperable & portable (Cross-) Sector
data-sets and services
industrial
energy
mobility
financial
green deal
agriculture
public
smart living
health
skills
...
GAIA-X Federation services
Federated & distributed for
interoperability Trust & Sovereignty
services
Identity & Trust
Sovereign Data Exchange
Federated Catalogue
Compliance
Portability, Interoperability &
Interconnectivity
Technical: Architecture of Standards
Commercial: Policies
Network/
Interconn.
Providers
CSP
(e.g. Regional,
specialized,
Hyperscalers)
HPC
(e.g. research...)
Sector
specific
clouds
EDGE
Compliance
Legal: Regulation & Policies
Infrastructure Ecosystem

GAIA-X and INSPIRE

Contractor: 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

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Want to know more …

MONDAY 25/10

10:00-11:30
Opening session - Building synergies between the European Green Deal and Digital Strategies

13:30-15:00
Supporting the Green Deal – Member State data from INSPIRE to Open Data and beyond

15:30-17:00
Citizen Science and the Green Deal Data Space - what, why and how?

TUESDAY 26/10

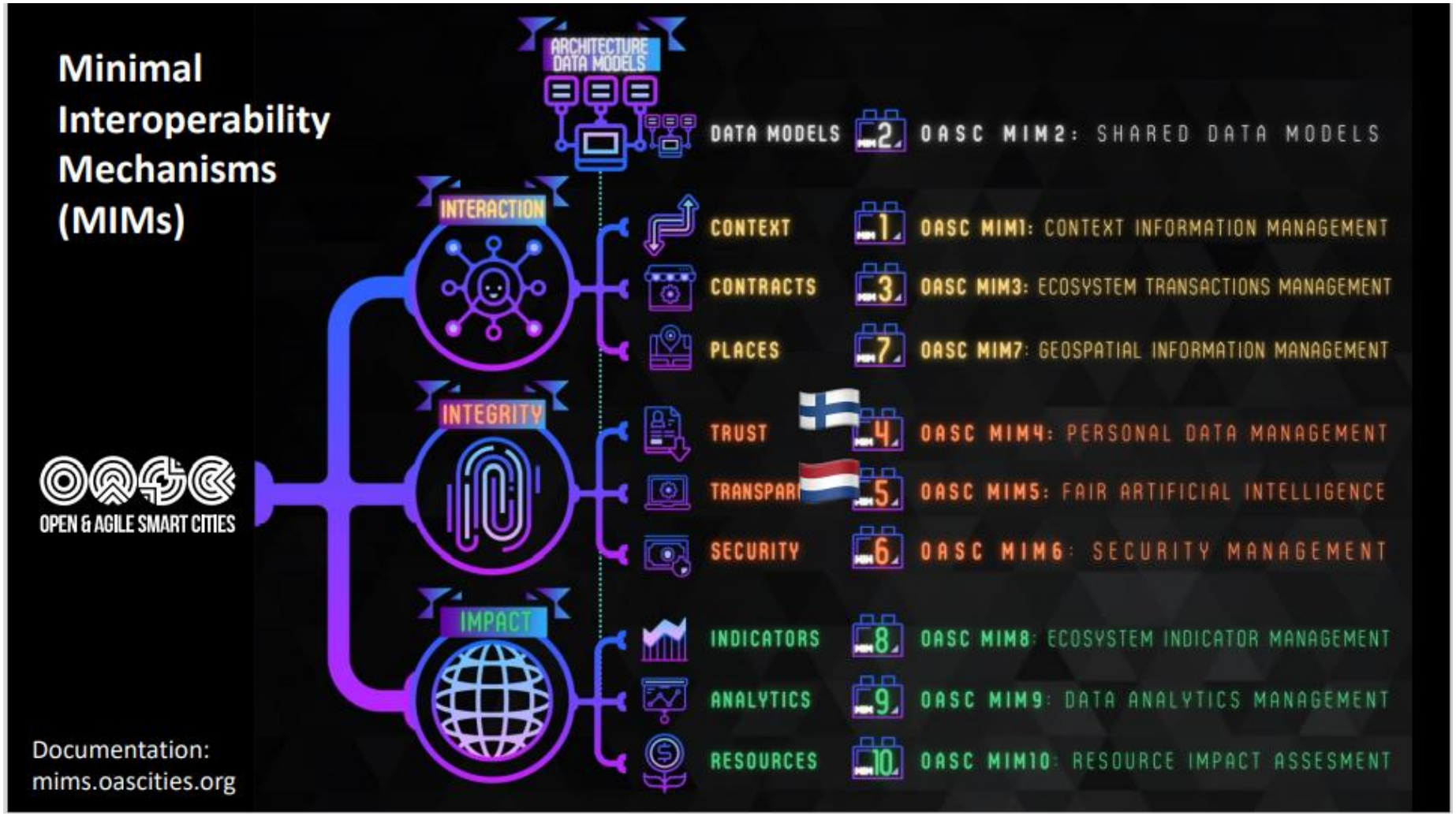
10:00-11:30
Architectures, infrastructures and technological enablers for environmental data sharing

13:30-15:00
Metadata catalogues in Europe: present and future

15:30-17:00
Past, present and future of INSPIRE: the policy perspective

Reuse of INSPIRE for the OASC Minimal Interoperability Mechanisms

Minimal Interoperability Mechanisms



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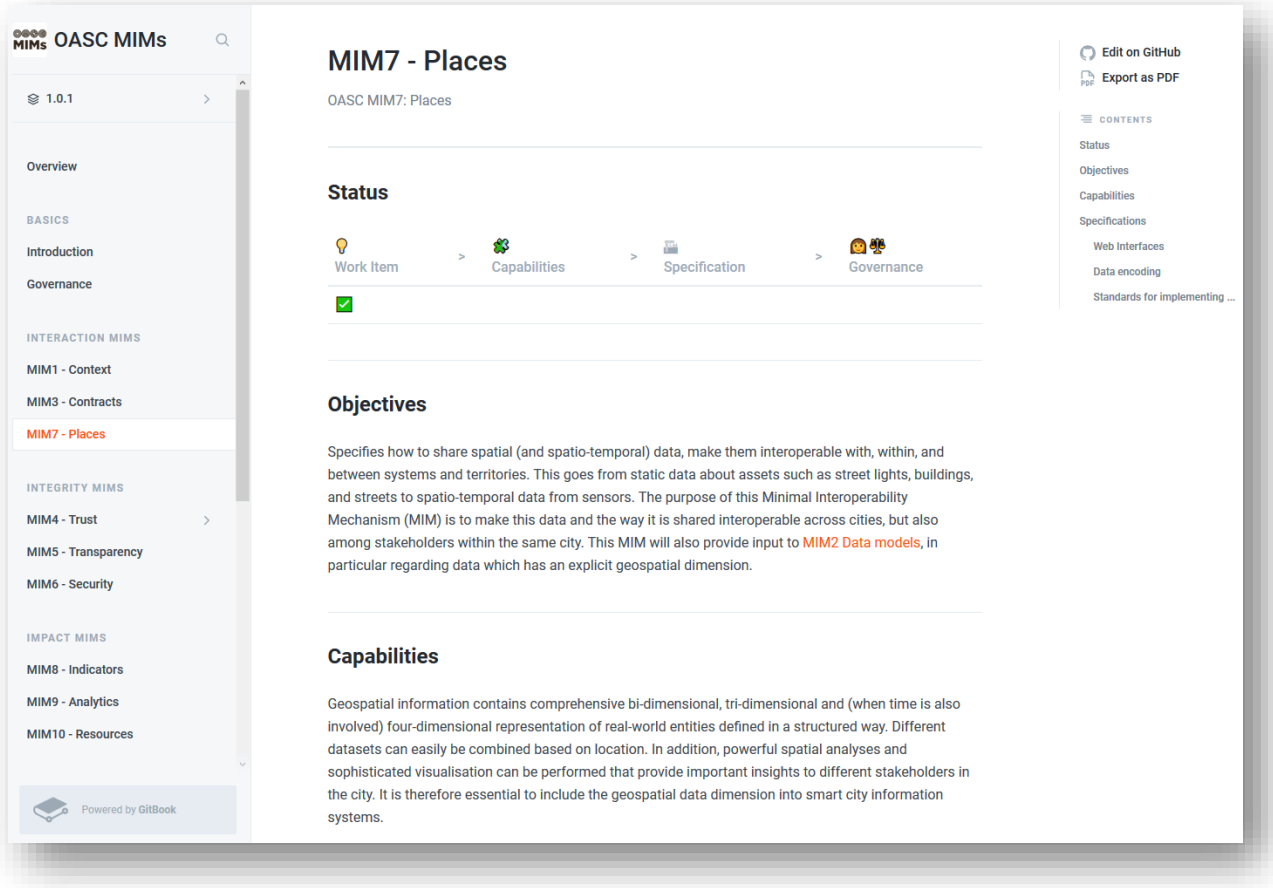
MIM7 - Places

- Working group recently established
  - OGC
  - EC (JRC, CNECT)
  - OASC
  - cities, associations, businesses
- Led by OASC
- Excellent opportunity for reuse of INSPIRE in smart cities



https://mims.oascities.org/interaction/oasc-mim7-places

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Thank you

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