ELISE

European Location Interoperability Solutions for E-Government

The role of smart cities in meeting objectives of the Green Deal
INSPIRE Conference 04.06.2020

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Key-points

• Re-use of INSPIRE principles for harmonising data sharing conditions
• Build on SDIs which have implemented INSPIRE principles
• The on-going ELISE Action, part of the Interoperability Solution for Public Administration (ISA²) programme, supports innovation through location interoperability framework, studies and applications
• Spatial is not special: “Geospatial” is not just a data category, rather a smart city enabler
• Evolution of SDIs to support data ecosystems and data spaces and the role of High Value Datasets
The role of INSPIRE

ANNEX: 1
- Addresses
- Cadastral parcels
- Geographical grid systems
- Hydrography
- Transport networks

ANNEX: 2
- Elevation
- Land cover
- Geology
- Orthoimagery

ANNEX: 3
- Agricultural and aquaculture facilities
- Atmospheric conditions
- Buildings
- Environmental monitoring facilities
- Human health and safety
- Meteorological geographical features
- Natural risk zones
- Population distribution and demography
- Sea regions
- Species distribution
- Utility and governmental services
- Area management / restriction / regulation zones & reporting units
- Bio-geographical regions
- Energy Resources
- Habitats and biotopes
- Land use
- Mineral Resources
- Oceanographic geographical features
- Production and industrial facilities
- Soil
- Statistical units
The role of INSPIRE

Discovery metadata shall be available for spatial data sets and services

Spatial data sets shall be available for discovery and view from the INSPIRE geo-portal (data does not yet need to be conformant to IR-ISDSS)

Spatial data sets shall be available for download and transformation (whenever applicable) from the INSPIRE geo-portal (data does not yet need to be conformant to IR-ISDSS)

Newly collected and extensively restructured spatial data sets shall be conformant to IR-ISDSS (incl. metadata for interoperability) and available through network services

All spatial data sets shall be conformant to IR-ISDSS (incl. metadata for interoperability) and available through network services

All invocable spatial data services shall be conformant to Annex V of IR-ISDSS (incl. metadata)

Invocable spatial data services related to newly collected and extensively restructured spatial data sets shall be conformant to Annexes VI and (where practicable) VII of IR-ISDSS (incl. metadata)

All invocable spatial data services shall be conformant to Annexes VI and (where practicable) VII of IR-ISDSS (incl. metadata)

INSPIRE Implementation Roadmap

03/11/2011
10/11/2011
28/11/2012
21/10/2012
03/12/2013
10/12/2013
10/12/2014
10/12/2015
23/11/2016
21/10/2017
10/12/2018
03/12/2019
10/12/2020
10/12/2021

Annex I

Annex II

Annex III
ELISE supports innovation through location interoperability

- Evolution of SDIs to support data ecosystems
- Technologies for location enabled innovation
- Collaboration models
- User centricity
- Location privacy
- Supporting innovation, growth and ROI
- Improving access to spatial datasets
- Managing data quality

EULF BLUEPRINT
Location interoperability guidance framework

STUDIES
KEY TOPICS IN LOCATION ENABLED DIGITAL TRANSFORMATION

SURVEYS
LOCATION INTEROPERABILITY FRAMEWORK OBSERVATORY
European state of play based on Blueprint

SOLUTIONS
PILOTS, EVALUATIONS, PRODUCTS
Energy / Transport use cases
EU Gazetteer, Registry

SKILLS
TRAINING & WEBINARS
Relevant ELISE studies

• Guidelines for public administrations on location privacy
• INSPIRE support to Multi-Modal Travel Information Services
• The role of Spatial Data Infrastructures in the Digital Government Transformation of Public Administrations
• Artificial Intelligence (AI) in the Public Sector
• Assessment of economic opportunities and barriers related to geospatial data in the context of the Digital Single Market
• Blockchain for Digital Government
• Digital Platform for Public Service
• Digital Government Benchmark - API study
• Exploring Digital Government transformation in the EU
ELISE applications in the Energy Efficiency domain

- Use case on the generalisation at EU level of a digital platform for public lighting implemented in Italy in 8,000+ Municipalities
- Use case on the harmonisation of Energy Performance Certificates of Buildings
- Use case on the harmonisation of SECAP (Sustainable Energy and Climate Action Plans), to support smart communities made by 70+ municipalities of the same Province, CoM signatories
- Use case on the harmonisation of energy simulations to assess the energy heat demand of buildings
- Use case on the assessment of energy performance of buildings from energy consumption data from smart meters.
**The future: implications and way forward for SDIs (and INSPIRE)**

### Data ecosystems
- Data ecosystems should be the focus of the SDI (i.e. use case driven)
- Better integration needed for both spatial (e.g. sensor, satellite data) and non-spatial data
- Challenge in supporting multiple data ecosystems in a harmonised way

### Innovation
- Support smart city innovation in repeatable ways (city models)
- Understand and support sector innovations (sector models)
- Evaluate and apply new technologies
- Invest in new skills

### Collaboration
- Involve users and partners in all SDI-related governance (demand driven)
- Incorporate citizen and business generated data
- Share learning from good practice innovations in data integration and use
- User feedback key to effective SDI

### Data frameworks
- Create standards-based framework for heterogeneous and agile use
- Simplify and modernise data access: Simplified metadata, open data, common licensing, IoT, event stream processing, APIs, micro-services
- Simplify interoperability models: High value datasets, broader and less deep models, persistent identifiers
- Reassess national data framework and align with European data strategy
Road navigation data ecosystem – static and dynamic data

**STATIC**
- Static Road Data Changes
- Seamless X-Border Mapping
- Map Data Exchange
- Private Sector Map Providers

**DYNAMIC**
- GPS Satellites
- Traffic Detector
- Traffic Control Centres
- Navigation System Vendors
- Navigation System Updates
- Traffic Messages
- Static Road Data Changes
- Road Authorities

CURRENT LOCATION

Navigation System Updates

Traffic Speed, Density, Flow
European data strategy enhances geospatial opportunities

**Ambition:**
“The EU can become a leading role model for a society empowered by data to make better decisions – in business and the public sector”

**Key elements**
- Policy framework
- Business support and integration
- Data spaces
- High value (open) datasets
- Demand driven

**Dates**
- Q420 Review importance of data and existing policy framework
- Q420 Legislative framework for European data spaces
- Q121 Implementing act for high value datasets
- 2021 Data Act
**Want to know more?**

**ELISE**

European Location Interoperability Solutions for e-Government

*Get started:* [ELISE Action page](http://ec.europa.eu/isa)

*Join and collaborate:* [ELISE Community](http://ec.europa.eu/isa)

*Stay tuned:* [Follow us on Twitter](http://inspire.ec.europa.eu/)

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The ELISE action is undertaken with the support of **ISA²**.

ISA² is a EUR 131 million programme of the European Commission which develops digital solutions that enable interoperable cross-border and cross-sector public services for the benefit of public administrations, businesses and citizens across the EU.

ISA² supports a large range of [actions](http://ec.europa.eu/isa) and [solutions](http://ec.europa.eu/isa). The ISA² solutions can be used free of charge and are open source when related to IT.

**ISA² - IT solutions for less bureaucracy**

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