ELISE

European

Location

Interoperability

Solutions for

E-Government

The role of smart cities in meeting objectives of the Green Deal
INSPIRE Conference
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Geospatial data for smart city applications

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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 (ISA^2) 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
- Administrative units
- Coordinate reference systems
- Geographical names
- Protected sites

ANNEX: 2

- Elevation
- Land cover
- Geology
- Orthoimagery

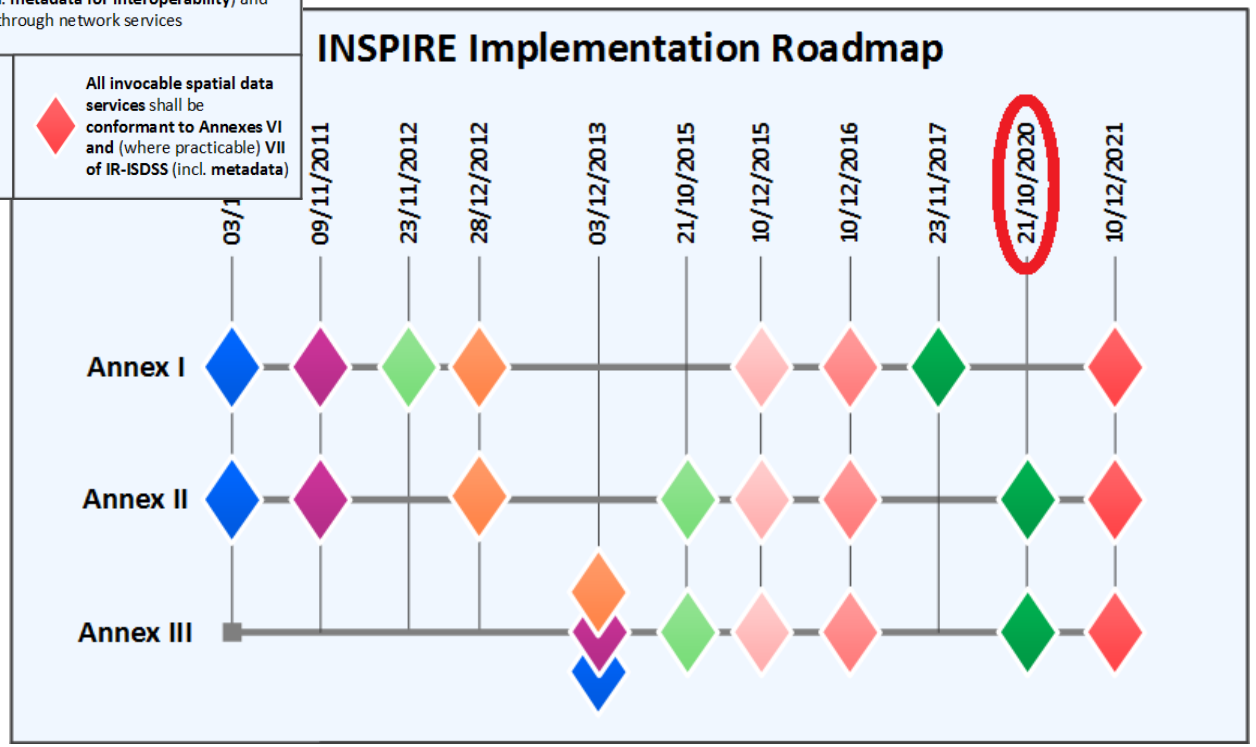
ANNEX: 3

- 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 facilitie
- Soil
- Statistical units

ISA²

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[1]) from the INSPIRE geo-portal (data does not yet need to be conformant to IR-ISDSS[2])
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**)



ELISE supports innovation through location interoperability

EULF BLUEPRINT
Location interoperability guidance framework

FRAMEWORK

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

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

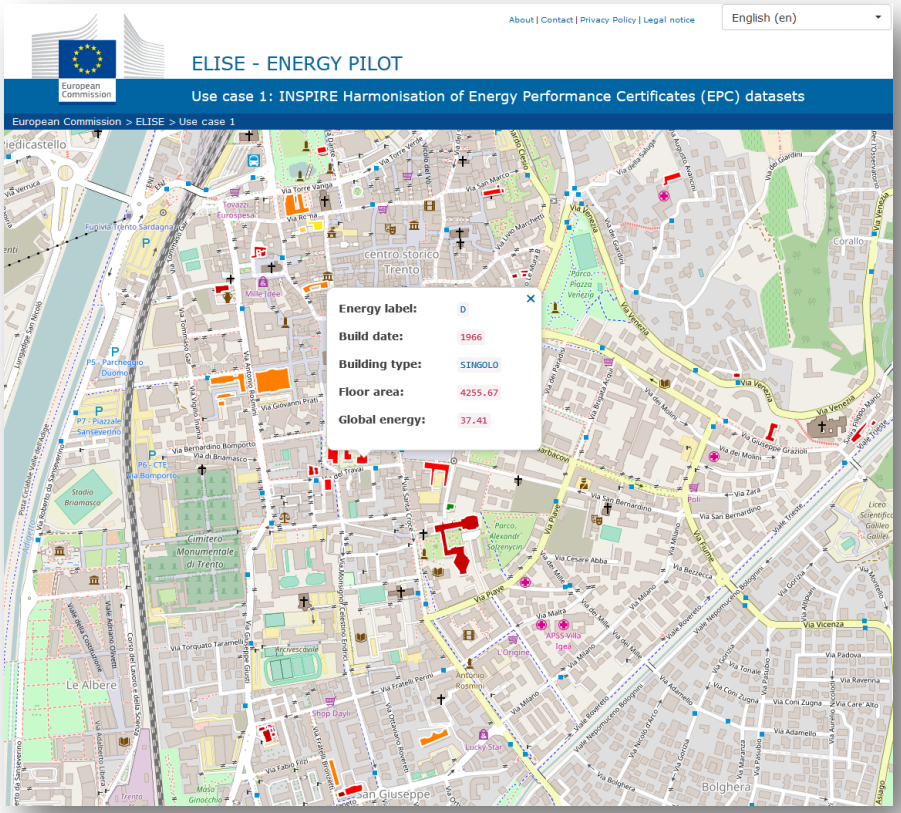
TRAINING & WEBINARS

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

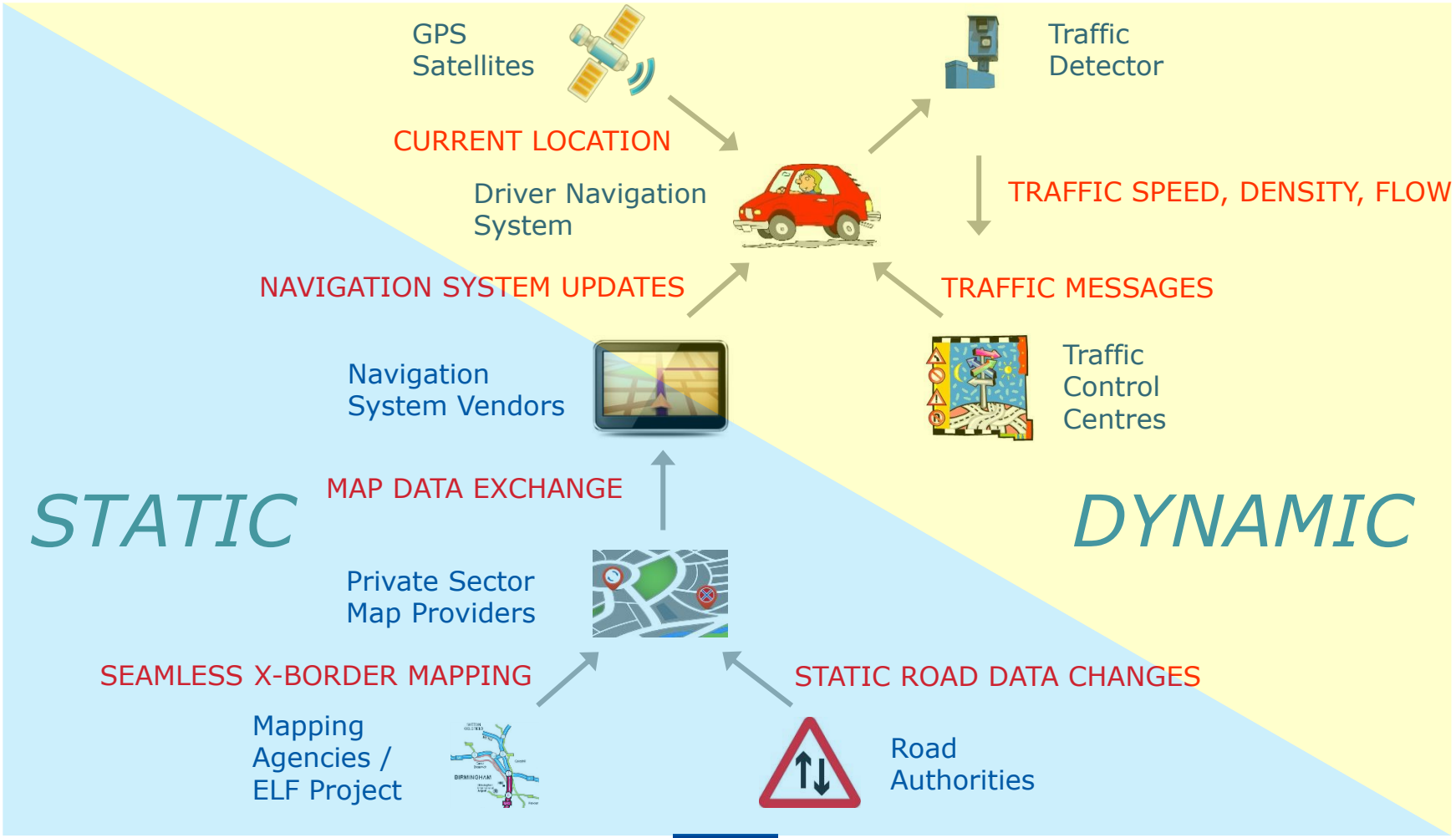
Collaboration

- 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



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

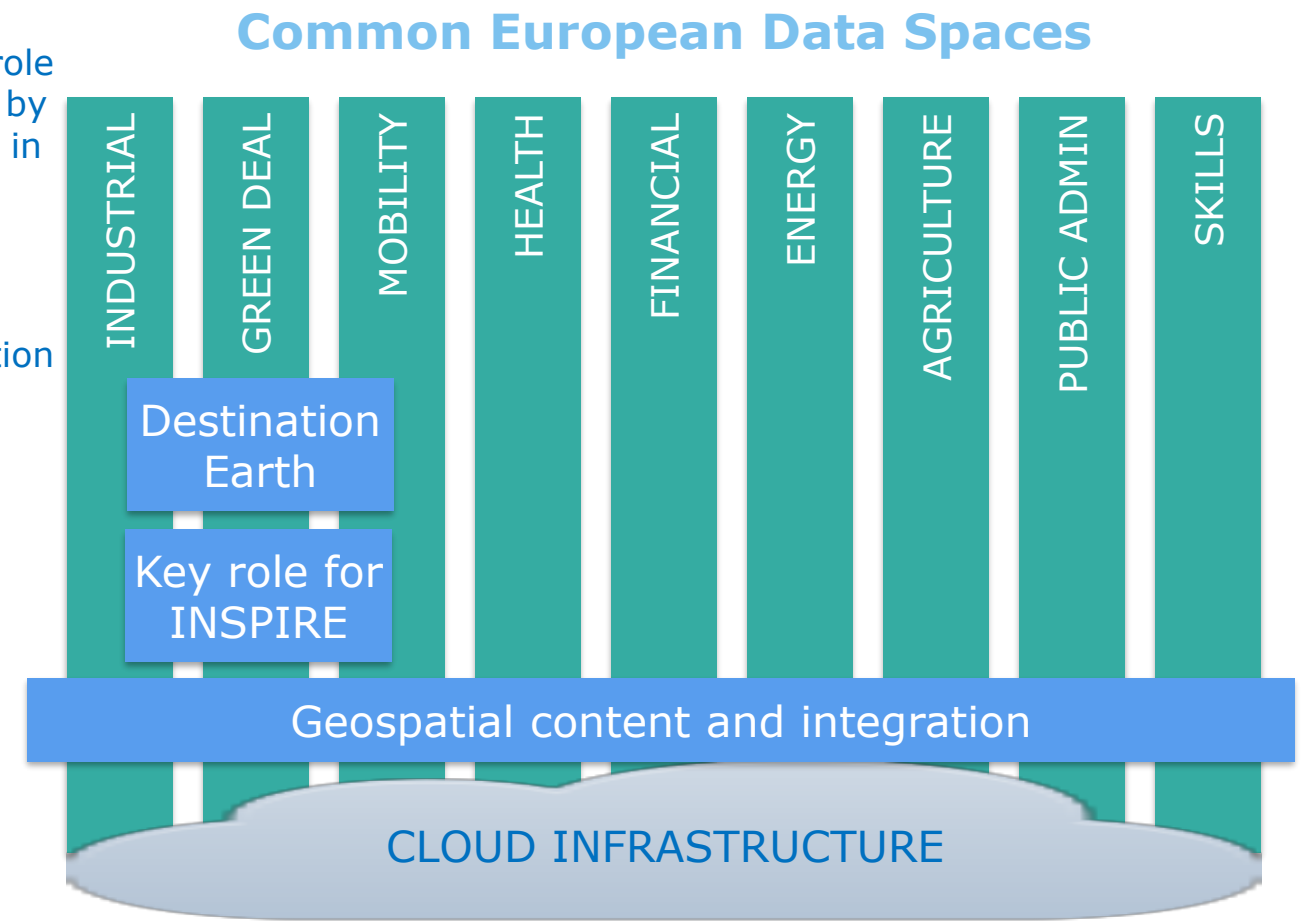
Dates

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

Join and collaborate: ELISE Community

Stay tuned: @EULocation

http://inspire.ec.europa.eu/

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 and solutions. The ISA² solutions can be used free of charge and are open source when related to IT.

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ISA²

European Commission