

The ARE3NA pilot on Linked (open) INSPIRE data

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*Serving society
Stimulating innovation
Supporting legislation*



ARe³NA

A Reusable INSPIRE Reference Platform



Interoperability



Openness



Reuse

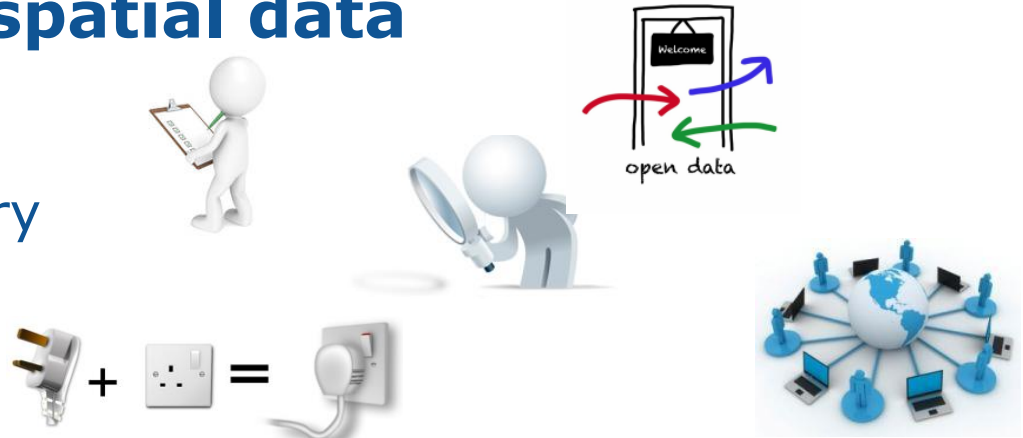


Collaboration

... sharing reusable components for **INSPIRE** implementation and interoperability in cross-border/cross-sector contexts

INSPIRE

- Directive 2007/02/EC – to establish a European spatial data infrastructure
- INSPIRE provides a comprehensive framework for **interoperability of spatial data**
 - inventory
 - data & service sharing
 - data & service discovery
 - network services
 - data interoperability
- INSPIRE data can be linked to other thematic data to enable cross-sector & cross-border “location-aware” analyses



Linking INSPIRE and thematic data



Thematic data

Reports

Report	Value	Unit	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Report 1	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 2	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 3	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 4	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 5	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 6	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 7	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 8	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 9	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Report 10	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12

Statistics

Statistic	Value	Unit	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Statistic 1	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 2	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 3	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 4	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 5	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 6	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 7	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 8	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 9	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Statistic 10	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12

Permits

Permit	Value	Unit	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Permit 1	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 2	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 3	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 4	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 5	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 6	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 7	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 8	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 9	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12
Permit 10	1.12	1.38	1.12	1.38	1.12	1.38	1.12	1.38	1.12

- INSPIRE data can serve as spatial reference for thematic data
- Importance of persistent identifiers
- Alternative encodings (e.g. RDF)?
- E-government applications?

Linked (open) INSPIRE data – Pilot



Put guidelines* into practice for

- Data (**RDF**)
- Persistent Identifiers (**PIDs**)
- Develop **pilot applications** based on Linked INSPIRE data

→ What are the **e-government use cases** and common areas of interest?



Governance		Operations		
PIDs Policy Defines what and how can be assigned a PID	PIDs Organisational structure Defines who has the authority and control (planning, monitoring and enforcement) over the management of PIDs	Registration Creates and registers PIDs	Validation Validates the format, location and the uniqueness of PIDs	Reduction Uses persistent PIDs to redirect to the original data resources
Business Case Justifies the investment in persistent identifiers	Cost Model Defines the allocation of costs and charges associated with the provision of persistent PIDs	PIDs Naming and Design rules Defines and formulates how to design persistent PIDs	Service Model Describes the set of services that will benefit from the use of persistent PIDs, this encompasses both data and metadata about services	
Financing		Architecture		

ISA Action 1.3.7: A Reusable INSPIRE Reference Platform (ARE3NA)
Study on RDF and PIDs for INSPIRE
Deliverable D3.2.0.4

Guidelines on methodologies for the creation of RDF vocabularies representing the INSPIRE data models and the transformation of INSPIRE data into RDF

Persistent Identifiers - Governance Report

* Developed in ARE3NA in 2014

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