

Toward Horizon 2020:

INSPIRE, PSI and other EU policies on data sharing and standardization



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Serving society Stimulating innovation Supporting legislation



The Mission of the Joint Research Centre

... is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies.

As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union.

Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.







Implementing the JRC Mission in the Policy Cycle

Policy evaluation

Effectiveness and impact assessment

Ad-hoc policy support

Crisis response

Policy anticipation

Agenda-setting Identification of emerging issues

JRC

Policy implementation

Compliance checks
Independent verification
Anti-fraud measures

Policy formulation

Expert advice

Policy adoption

Decision-making process
Selection of programme options





Why INSPIRE - 2001?

- Needs
- Better information needed to support policies
- Improvement of existing information flows
- Differentiation across regions to be considered
- Revision of approach to reporting and monitoring, moving to concept of sharing of information



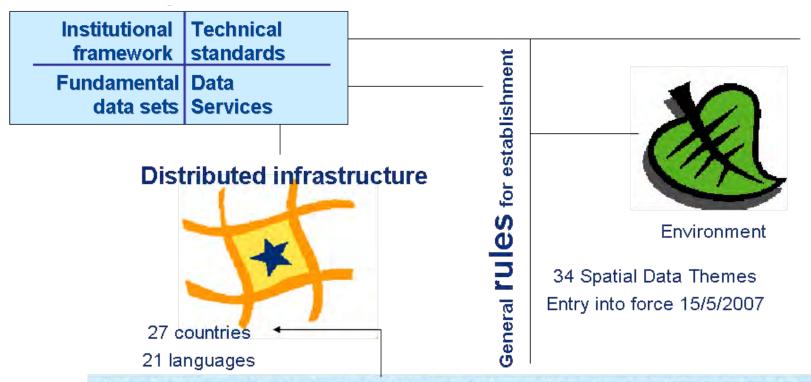
Situation in Europe

- Data policy restrictions
 pricing, copyright, access rights, licensing policy
- Lack of co-ordination
- across boarders and between levels of government
- Lack of standards
- incompatible information and information systems
- Existing data not re-usable
- fragmentation of information, redundancy, inability to integrate



What is INSPIRE?

"Infrastructure for Spatial Information in the European Community"



Set of European and national Legal Acts and their coordinated implementation





INSPIRE in a nutshell

- Comprehensive Data inventory
- Formal (standardised) documentation (Metadata Implementing Rule Legal Act)
- Facilitate Data discovery through standardised Discovery Services (Network Service IR Legal Act)
- Data Sharing
- Facilitate Data Use by allowing view, download and transformation (IR Network Service)
- Promote long term Data Harmonisation and interoperability by adopting common models to "expose" the data (IR data interoperability)
- Leave to Member States responsibility for addressing cross-border issues



INSPIRE Legal Acts published in the Official Journal of the EU

Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) *14.03.2007*

INSPIRE **Metadata** Regulation 03.12.2008 (corrigendum 15.12.2009)

Commission Decision regarding INSPIRE monitoring and reporting 05.06.2009

Regulation on INSPIRE **Network Services** 19.10.2009 (View and discovery)

Regulation on INSPIRE **Data and Service Sharing** 29.03.2010

Commission Regulation amending Regulation (EC) No 976/2009 as regards download services and transformation services 10.12.2010

COMMISSION REGULATION implementing Directive 2007/2/EC of the European Parliament and of the Council as regards **interoperability of spatial** data sets and services 10.12.2010 (Annex I)

COMMISSION REGULATION amending Regulation 1089/2010 as regards interoperability of spatial data sets and services 05.02.2011 (code list)

European law affecting 30+ countries, 21+ languages

Centre





INSPIRE's evolving policy context







PSI Directive amendment

Wider scope: cultural data

Less voluntary

Marginal costing

Access = re-use

From re-use to open data

Machine readable





EU Open Data Strategy

- PSI Directive Amendment
- Open research data
- Financial measures
- Leading by example
- Share good practice



2012 2013 2014 // 2020

Joint Research Centre

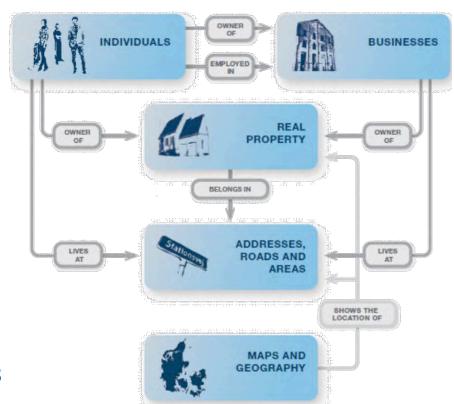


Example: Danish core registers

- basic data needs to be as correct, complete and up-to-date as possible
- all public authorities must use public sector basic data
- as far as possible, basic data (excluding sensitive personal data) must be made freely available to businesses as well as the public
- basic data must be distributed efficiently, accommodating the needs of the users.

Source:

http://uk.fm.dk/publications/2012/good-basic-data-for-everyone/





7th Environmental Action Plan (EAP) 'Living well, within the limits of our planet'

Provision and improvement of structuring and disseminating **environmental knowledge** in particular, for all key EU obligations in the environmental field

Priority objective 5: To improve the evidence base for environment policy

Shared Environmental Information System (SEIS), INSPIRE, GMES

"... The potential contribution of bottom-up approaches to data and information gathering and dissemination should also be recognized and promoted, such as **voluntary citizen science** initiatives which are also important in engaging and informing the public..."





Interoperability Solutions for European Public Administrations

A Commission-driven EU programme to facilitate the efficient and effective electronic cross-border and cross-sector interaction between European public administrations

... enabling the delivery of electronic public services supporting the implementation of Community policies and activities

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...by ensuring the availability of common frameworks, common services and generic tools

...by increasing the awareness of ICT aspects of Community legislation.

isa

EULF in a nutshell

"Location data and services created by public administrations across Europe will be accessible by users inside and outside of government for individual, cross-sector and cross-border applications and will play a vital part in the drive towards effective e-government"

What will it contain?

The EULF will be a set of guidelines, standards, principles, policy measures and strategic actions that will help remove barriers to re-use and interoperability and realise the potential of these valuable assets

How will it be developed?

The EULF will be developed collaboratively with stakeholders and will be based on the wider adoption of INSPIRE, consistent with the Digital Agenda for Europe (DAE) and the European Interoperability Framework (EIF) EU Policy Alignment

Government Integration

Standards and Interoperabili ty

Benefit Realisation

RUIRP in a nutshell



"To establish a reference platform and develop common components for the successful implementation of a EU spatial data infrastructure in line with the requirements of INSPIRE taking into consideration policies such as Digital Agenda for Europe and open data related initiatives in the Member States and the EC."

What will it contain?

Best practices, Re-usable open source software components, conformance test suites, technical documentation, collaborative platform

How will it be developed?

The RUIRP will be developed collaboratively with stakeholders building on the experience gained in the development of INSPIRE and contributing to the Digital Agenda for Europe



Relationship between EULF and RUIRP

EIF Levels

RUIRP

Policy alignment for location information-collecting requirements

Legal

e-Government integration, best practices, facilitate new applications, benefit realisation- <u>build community</u>, <u>promote standards</u>

Organisational

Technical community

Priorities / standards for core and domain-specific location information

Semantic

Technical documentation, collaborative platform

Technical

Re-usable INSPIRE technical solutions, standards, guidelines



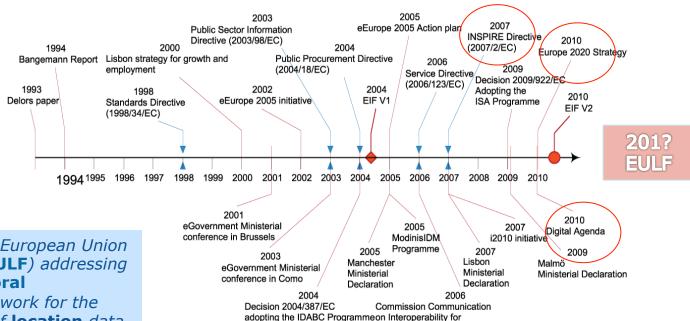


Digital Agenda for Europe

a flagship initiative of the Europe 2020 Strategy As recognized in the recent communication "Towards interoperability for European public services" COM(2010) 744 Action on interoperability is essential to maximise the social and economic potential of ICT

EUROPEAN INTEROPERABILITY FRAMEWORK FOR EUROPEAN PUBLIC SERVICES

The EU initiatives shown below illustrate, from a historical perspective, the support provided at political level for interoperability among public administrations.



Pan- European eGovernment Services

Objective is to create a European Union Location Framework (EULF) addressing a EU wide, cross-sectoral interoperability framework for the exchange and sharing of location data and services



Standards for growth

Word-wide re-use of expertise, experience, and networks

Formal and de-facto Standards Developing Organizations



Training offer for SME's













e-Government Core Vocabularies, W3C

Best Practices for SME's

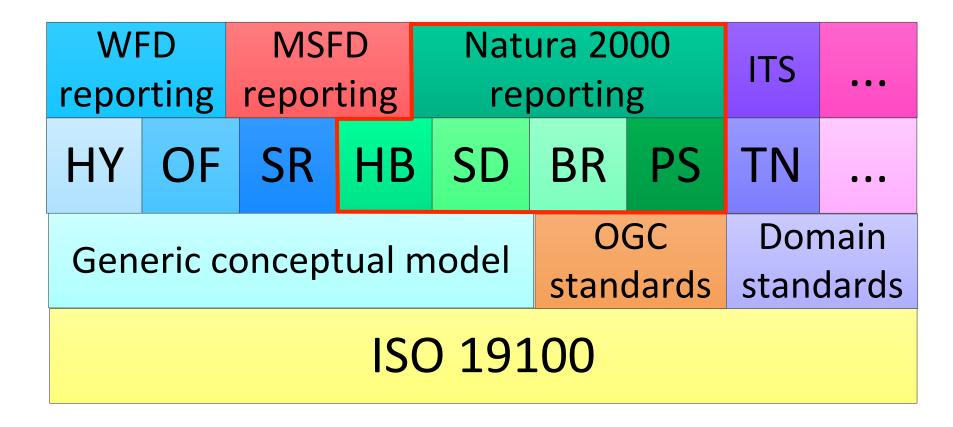


Semantic Assets: Asset Description Metadata Schema





Data interoperability – standards stack

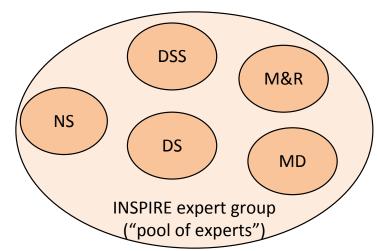






Setting up the INSPIRE MIF*

- Official MIF governance structure: official INSPIRE Expert Group to be set up by EC
 - coordinated by the EC
 - Mobilization of expert resources is key to success → MIF will not start from scratch, but use substantial pool of expert knowledge already available
- Experts to be proposed by Member States and selected by EC
- Coordination & maintenance joint effort by EC & MS
 - EC to provide secretariat & financial support for logistical expenses
 - MS to support experts' in-kind contribution`







Setting up the INSPIRE MIF

- EC will issue and update regularly a work programme
 - to allow experts to plan and quantify their efforts
 - based on change requests
 - discussed with the Member States
 - regular updates (e.g. once every 3 months) to reflect newly identified issues and priorities
- Transition period
 - need to deal with urgent maintenance issues already identified
 - while setting up the Expert Group and rolling work programme, experts available in the DTs, TWGs and IOC TF will be mobilized or reactivated in a more informal way





INSPIRE & opportunities for SMEs

- Size of the Geo-ICT services market
 - 550,000 <u>ICT</u> enterprises, with 400bln€ turnover, 191bln€ added value, 3mln employees
 - 2% are SMEs offering <u>Geo-ICT</u> services
 - INSPIRE creates opportunities to innovate and to create new services, thereby supporting growth and jobs







In Summary

- INSPIRE is now!
- Member States are implementing Inspire compliant services.
- The 2013 and 2015 deadlines for Annex II & III mean that work to comply with INSPIRE needs to be starting now
- INSPIRE widens use of data held by thematic environmental communities
- data used by greater range of decision makers
- Widens the scope of what data is
- INSPIRE is a multi-purpose infrastructure
- Activities on-going to re-use INSPIRE in other policy areas







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