



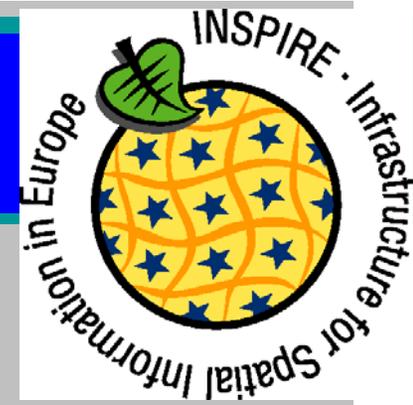
INSPIRE Drafting Teams Informe de situación/progreso

Expertos propuestos por la LMO (Legally Mandated Organiz.):
IDEE GT de la Comisión de Geomática (CSG)

Pedro J. Álvarez Pérez-Aradros - Universidad de Zaragoza
Pedro R. Muro-Medrano - Universidad de Zaragoza
Michael Gould - Universitat Jaume I

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INSPIRE DT Networking Services

Pedro Álvarez Pérez-Aradros

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Objectives of the Drafting team

❑ Objective of the Network services drafting team

- ❖ To draft Implementing rules for INSPIRE network services

Upload services

Download services

Discovery services

Transformation services

Data view services

"Invoke spatial data service" services

❑ Activities

- ❖ Clarification of definition and scope of INSPIRE Network services
- ❖ Analysis of reference material
- ❖ Define interface specifications for INSPIRE network services
- ❖ Draft Implementing rules

Objectives of the Drafting team

❑ To run these activities:

❖ JRC supports the DT by organising "state-of-the-art" workshops:

- on discovery services (ISPRA - October 2005 - JRC + ESA)
- on transformations services and chaining services (Vienna - April 2006)
- on download services (Innsbruck - June 2006)
- on "horizontal services" (Munster - ¿?)

❖ Sub-groups has been created in the DT:

- One for Reference model and "horizontal services" (UAA, DRM, e-commerce)
- One for each service

❖ We have audioconferences twice a month

❖ We share documents on Circa portal

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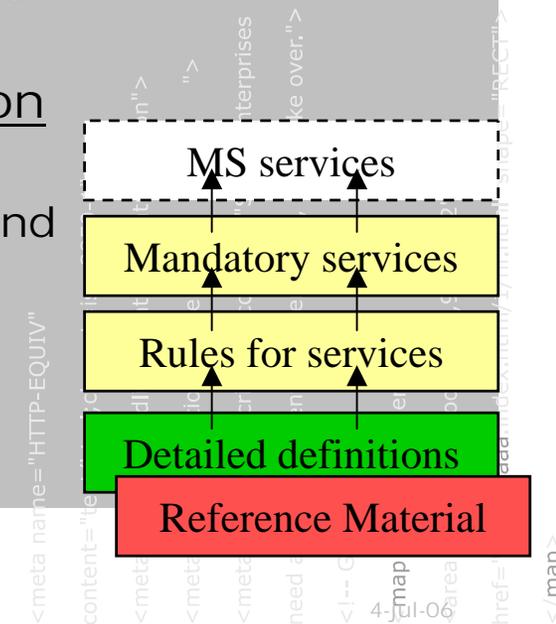
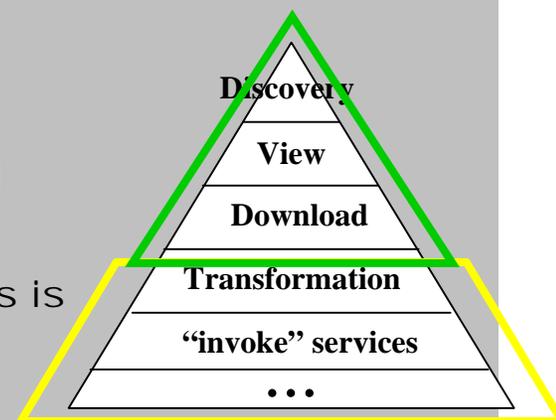
Progress and open issues (April-June 2006)

□ Detailed definition of INSPIRE NS (discussion stage):

- ❖ Current proposal of the reference model
- ❖ Scope of the transformation services
 - A first instance of transformation services is to operate SRS transformations
 - Other transformation services? (data harmonization, interoperability, etc.)
- ❖ "Invoke service" services are understood as the possibility to chain services?

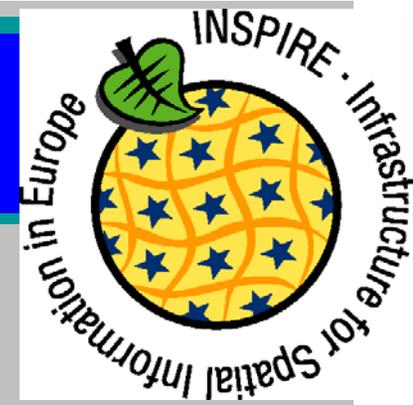
□ Interface specifications & Implementation rules of INSPIRE NS (early stage):

- ❖ All INSPIRE services will be invocable and shall be implemented according to the INSPIRE Rules for services. In addition, MS shall implement a set of mandatory INSPIRE services conforming to those rules.



Deliverables and Planning (updated in June 2006)

Deliverable	Title	Milestone	Who
D 3.1	Network service definition - Clarification of scope: Part 1 : Reference model, Discovery, View, Download services Part 2 : Upload, Transformation, Invoke service" services	6/2006 9/2006	DT
D 3.2	Reference Material analysis (give priority to the projects, 12/52)	7/2006 11/2006	DT
D 3.3	Interface specifications for Network Services (only View Services)	9/2006	DT
D 3.4	Test plan (only View Services)	9/2006	DT
D 3.5	Draft Implementing Rules v 0.x (only View Services)	10/2006	DT
D 3.6	Tests n°1 and report test results	11/2006	DT
D 3.7	Draft Implementing Rules v 1.0	12/2006	DT
D 3.8	Tests n°2 and report test results	01/2007	DT
D 3.9	Draft Implementing Rules for reviewing by SDIC/LMO	03/2007	DT/CT



INSPIRE DT

Monitoring & Reporting

Pedro R. Muro-Medrano

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Scope

❑ Recital 32

"Preparatory work for decisions concerning the implementation of this Directive and for the future evolution of INSPIRE requires continuous monitoring of the **implementation** of the Directive and regular reporting."

❑ Article 21

"1. MS shall monitor the **implementation** and **use** of their infrastructures for spatial infor... »

"2. ... MS shall send to the Commission a report including summary descriptions of: coordination, contribution of public sector to SDI, use of SDI, sharing agreements between public authorities, costs and benefits of implementing this directive

Work Programme

❑ Objective

- ❖ Implementing Rules for reporting and monitoring by 2007.

❑ 3 deliverables

- ❖ Monitoring indicators
- ❖ Implementing rules for monitoring
- ❖ Implementing rules for reporting

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First draft of indicators

❑ Organisation according to topics of the Directive:

- ❖ Spatial Data Sets
- ❖ Metadata
- ❖ Network service
- ❖ Data-sharing
- ❖ Other indicators (for reporting)

Difficulties:

- ❖ Measure results defined by other DTs
- ❖ Need to clarify terms used

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Spatial Data Sets indicators (1)

❑ Objective :

Providing harmonised spatial data sets

❑ Examples of questions:

- ❖ Do data sets exist for each theme of annex I, II, III? geographic extension (percentage of territory)
- ❖ Have you check the consistency of the data sets with your neighbouring countries (topology, model) ?
- ❖ Have you check the consistency of the data sets with INSPIRE specifications (logical and semantic)?

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Spatial Data Sets indicators (2)

□ Draft indicators :

- ❖ Availability of Spatial Datasets (Status)
- ❖ Harmonisation/interoperability of Spatial Datasets (according IR from DT Specifications)
- ❖ Up-to-date Spatial Datasets

□ Open issue : what about ...

- ❖ Quality - Scale/resolution - Update strategy ...

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MetaData indicators (1)

❑ Objective :

Garanteeing metadata available, complete and up-to-date

❑ Examples of questions:

- ❖ Does metadata exist for each dataset of the themes in annex I, II, III ?
- ❖ Is metadata conform to the requirements in the directive (article 5) ?
- ❖ Is Metadata consistent with data ?

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MetaData indicators (2)

□ Draft indicators :

- ❖ Availability of Metadata of Spatial Datasets (Status)
- ❖ Availability of Metadata of Services (*Status*)
- ❖ Compliance of Metadata of Spatial Datasets (acc *IR from DT Metadata*)
- ❖ Up-to-date Metadata of Spatial Datasets

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Network services indicators (1)

❑ Objective :

Providing a network of easy-to-use and available interoperable services

❑ Examples of information to collect :

number of ...

- ❖ users for each service (discovery, view, download, transformation)
- ❖ providers
- ❖ links ; services through the Community geo-portal ; geo-portals
- ❖ available services

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Network services indicators (2)

□ Draft indicators :

- ❖ Accessibility of Metadata of Spatial Datasets and Services
- ❖ Availability of Services (*viewing, downloading, transformation*)
- ❖ Performance of Services (available, time response, and minimum performance criteria acc. IR DT Network services)
- ❖ Use of Services (for monitoring and reporting)

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Data-sharing indicators (1)

❑ Objective:

Enabling data-sharing between public authorities for environment purposes

❑ Some questions:

- ❖ Number of existing framework sharing agreements between public authorities (between federal and local levels, ministries, ...)
- ❖ Number of written sharing agreements/laws between public authorities
- ❖ Number of cross border agreements
- ❖ Are the agreements open to international bodies ?
- ❖ Are common licences (from IR) accepted ?
- ❖ What is for free? With fees ?

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Data-sharing indicators (2)

□ Draft indicators :

- ❖ Accessibility (how to reach data sets)
- ❖ Usability
 - What can be done with data sets?
 - For free or with fees?
- ❖ Other?
 - Automated information from Metadata : restriction of use (security), constraints (legal conditions)

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Other indicators (1)

- ❑ To be defined according reporting needs (article 21)
- ❑ Examples of question:
 - ❖ Is there a contact point with the Commission to implement the directive ?
 - ❖ Is there a coordinating structure ?
 - ❖ Is there an official mandate ? (legislative text of Official Journal)
 - ❖ How many stakeholders for each type (users, producers, added-value service providers, coordinating bodies) are involved ?
 - ❖ Costs of implementation (development costs (software, hardware, staff) ; costs of coordination structure ; costs of transformation to harmonised model)
 - ❖ Benefits : cost avoided (what development is avoided)
Other benefits (quantitative) : improvement of delay of delivering

Open issues

❑ Timing issue

- ❖ Fix now indicators for ten years?
- ❖ Fix targets before IR of the other DTs are defined?
- ❖ Monitoring "on a permanent basis"
 - European level: Every quarter, every semester, other?
 - Within MS: other periodicity?
- ❖ Beginning of monitoring

❑ Tools for automated indicators

- ❖ To be developed after the adoption of IR for MS
- ❖ European level? National level?

❑ Indicators

- ❖ Useful for EC and acceptable by MS?

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INSPIRE DT Metadatos

Michael Gould, DT metadatos

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Chapter II Metadata

Article 8

1. Member States shall ensure that metadata are created for spatial data sets and services, and that those metadata are kept up to date.
2. Metadata shall include information on the following:
 - (a) the conformity of spatial data sets with the implementing rules referred to in Article 11(1);
 - (b) rights of use of spatial data sets and services;
 - (c) the quality and validity of spatial data;
 - (d) the public authorities responsible for the establishment, management, maintenance and distribution of spatial data sets and spatial data services;
 - (e) the spatial data sets to which public access is limited in accordance with Article 19 and the reasons for such limitation.
3. Member States shall take the necessary measures to ensure that metadata are complete and of high quality.

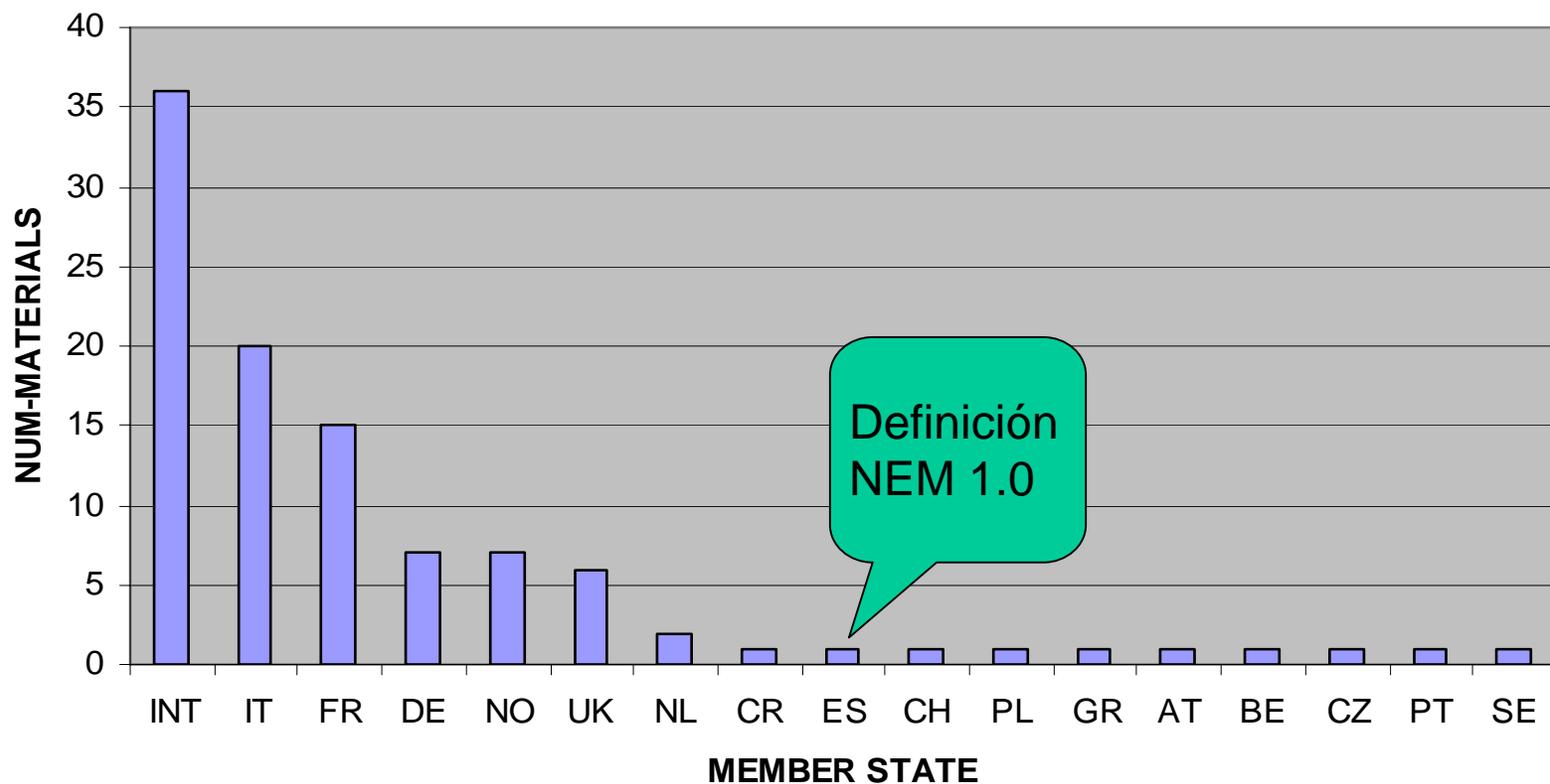
Documento 1.2

- ❑ 1.2: "Análisis de los materiales de referencia"
 - ❖ Materiales contribuidos por SDIC/LMO, finales de 2005
 - ❖ Analizados principios de 2006
- ❑ Documento 1.2 en su versión 0.9 (Gould editor)
 - ❖ Versión 1.0 para finales de junio
- ❑ ~80 materiales (algunos duplicados) contribuidos, 40 otros añadidos por los mismos miembros del DT
- ❑ Muchos (~40%) inútiles por tratarse de enlaces web rotos, proyectos poco relevantes, múltiples documentos sobre partes del mismo proyecto...

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Contribuciones por estado miembro

CONTRIBUTIONS METADATA REF MATERIALS



Sumario resultados 1.2

- ❑ Solo una muestra parcial (contribuciones voluntarias) de los materiales sobre md
- ❑ Gran coincidencia en soporte de ISO 19115 (perfiles nacionales/regionales)
 - ❖ También algo de Dublin Core
- ❑ Poca mención de metadatos para servicios (algo de 19119); algunas implementaciones en Alemania

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Sumario resultados 1.2 (2)

- ❑ Grupos estratégicos (internacionales) incluidos: Agencia Europea de Medio ambiente, Organización Mundial de Meteorología
 - ❖ Ambos creando perfiles de 19115
 - ❖ Algunas necesidades especiales, pero están colaborando con OGC y ISO sobre posibles extensiones/modificaciones.

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Documento 1.3

- ❑ “Reglas de Implementación, metadatos”
- ❑ Actualmente en borrador versión 11
- ❑ Borrador 10 “facilitado extraoficialmente” al “equipo NEM”
 - ❖ Comentarios enviados sobre definición de elementos, vía representante de DT metadatos (Gould)
 - ❖ Para su incorporación en el borrador 12

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Directive – Article 18

2. For the purposes of the services referred to in point (a) of paragraph 1, as a minimum the following combination of search criteria shall be implemented:
- (a) keywords;
 - (b) classification of spatial data and services;
 - (c) spatial data quality and accuracy;
 - (d) degree of conformity with the harmonised specifications provided for in Article 11;
 - (e) geographical location;
 - (f) conditions applying to the access to and use of spatial data sets and services;
 - (g) the public authorities responsible for the establishment, management, maintenance and distribution of spatial data sets and services.

Abstract discovery set – level 1

Metadata element	Search	Response	Condition
Any Text	X		
Resource title	X	1	
Reference date	X	1..*	When the resource is valid only in a time period
Geographic extent of the resource	X	0..*	Mandatory for datasets and dataset series
Resource language	X	0..*	When dataset or dataset series has textual information
Resource topic category	X	0..*	Mandatory for datasets and dataset series
Keyword	X	1*	
Spatial resolution	X	1	Mandatory for datasets and dataset series
Service type	X	0..*	If the resource is a service, or if a service is available to process the resource (datasets and dataset series)
Resource responsible party		1..*	
Abstract		1	
Resource locator		0..*	When a linkage to the resource or a contact point for more information about the resource is available

Abstract discovery set – level 2

Metadata element	Search	Response	Condition
Constraints		0..*	When there are constraints regarding access or usage
Lineage		0..1	When a quality report or other lineage statements are required
Service type version		0..*	If the service is a well known service type
Operation name		0..*	If the resource is a service
Distributed computing platform		0..*	If the resource is a service
Resource Identifier		0..1	If an identifier is available

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Taller "download services"

- ❑ 19 Junio, Innsbruck
- ❑ Organizado por DT Network Services
- ❑ Consulta sobre relaciones entre *metadatos*, *especificación de datos* (temas de otros DT) y los servicios para bajar geodatos.
 - ❖ Def. download: obtener una instancia de los datos (diferente respecto a servicios de visualización--*view services*)

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Resultados taller

- ❑ Trabajo hasta el momento, del DT metadata, enfocado en metadatos de contenido (y con enfoque en descubrimiento) y no de metadatos de servicios
- ❑ Futuro trabajo: necesario definir reglas para describir servicios (19115/19119, WSDL, otro), descubrir servicios (UDDI, ebXML, otro)

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