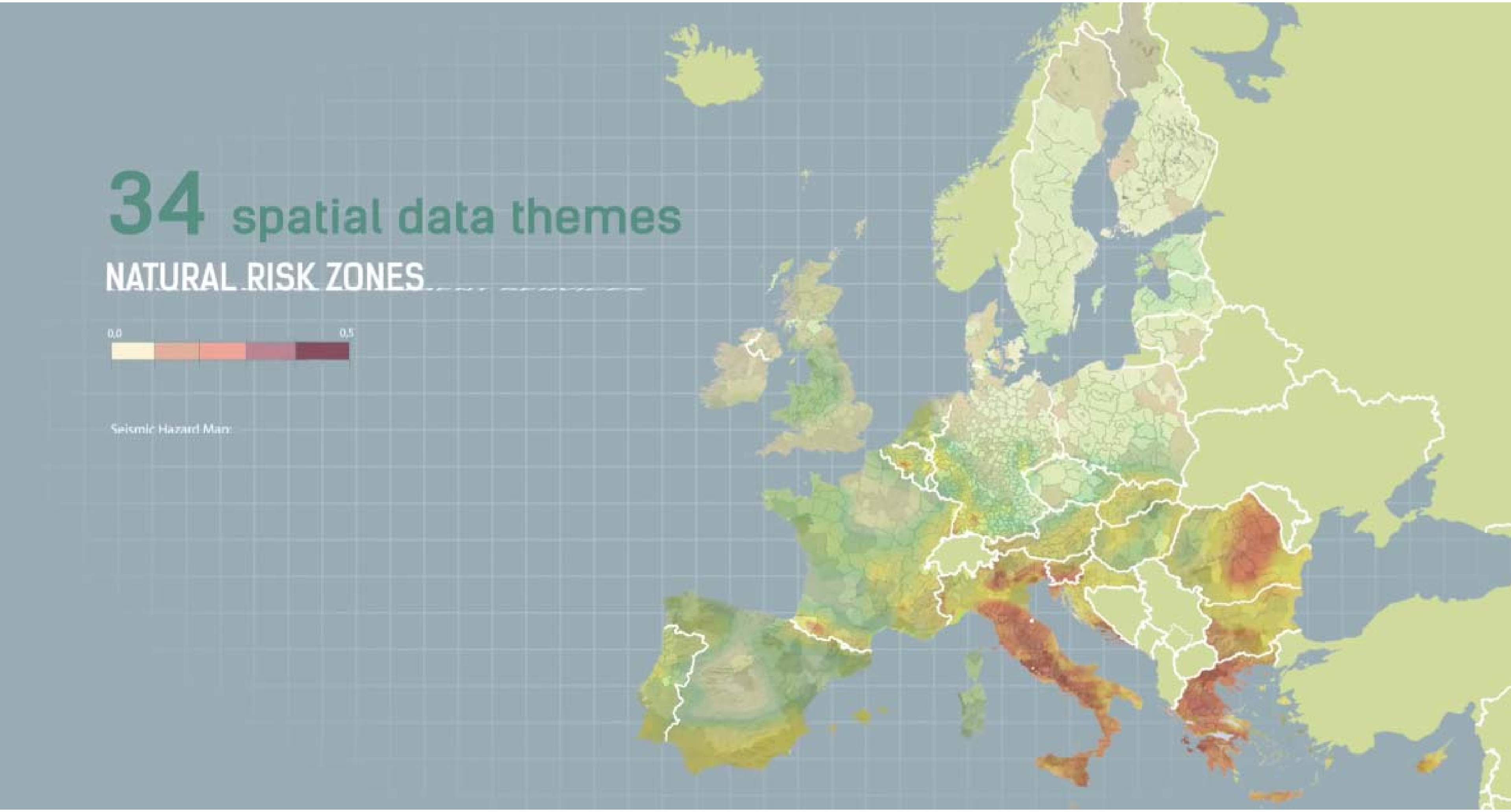
Riepilogo su INSPIRE: *Adempimenti, Roadmap, implementazione e situazione italiana*

Carlo Cipolloni

ISPRA Servizio Geologico d'Italia *– Membro INSPIRE MIG-T*

Cosa dice?

Le **infrastrutture per l'informazione territoriale** degli Stati membri dovrebbero essere **finalizzate a garantire che i dati territoriali siano archiviati, resi disponibili e conservati al livello più idoneo**; devono consentire di **combinare** in maniera coerente dati territoriali provenienti da **fonti diverse** all'interno della Comunità e di condividerli tra vari utilizzatori e applicazioni; devono permettere di condividere i dati territoriali raccolti ad un determinato livello dell'amministrazione pubblica con altre amm. …


34 spatial data themes
NATURAL RISK ZONES
0,0
0,5
Seismic Hazard Map

Adempimenti

- ***Decreto Legislativo 27 gennaio 2010, n. 32, "Attuazione della direttiva 2007/2/CE, che istituisce un'infrastruttura per l'informazione territoriale nella Comunità europea (INSPIRE)"***

- ***L. 135/2012 – «Disposizioni urgenti per la revisione della spesa pubblica con invarianza dei servizi ai cittadini» – art. 12-quaterdecies:***

- **CAD** ***(D.Lgs. 82/2005)*** - Codice dell'amministrazione digitale.
- **PSI** ***(D.Lgs. 36/2006)*** - Attuazione della direttiva 2003/98/CE relativa al riutilizzo di documenti nel settore pubblico.
- **Open Data** - Ulteriori misure urgenti per la crescita del Paese. ***(L. 221/2012)*** e Decreto Trasparenza ***(D.lgs n. 33/2014)***

Adempimenti

ART. 5

Le pubbliche amministrazioni forniscono i metadati di propria pertinenza al Repertorio Nazionale dei Dati Territoriali (RNDT) previo accreditamento. Il metadato, conforme sia al profilo Nazionale che alle ultime specifiche dello standard INSPIRE, può essere creato e caricato nel RNTD o raccolto unicamente tramite il servizio di catalogo CSW-ISO.

ART. 7

Il servizio di ricerca è garantito sulla base del RNDT che costituisce parte dell'infrastruttura nazionale per l'informazione territoriale e del monitoraggio ambientale.

ART. 6

Le autorità pubbliche rendono disponibili set di dati territoriali raccolti ***ex novo e/o rielaborati in maniera estensiva*** *ed i corrispondenti* ***servizi entro due anni dall'adozione*** *delle disposizioni comunitarie. Le autorità pubbliche rendono disponibili* ***i rimanenti set di dati*** *territoriali ed i servizi ad essi relativi ancora in uso* ***entro sette anni dall'adozione*** *delle predette disposizioni comunitarie di esecuzione.*

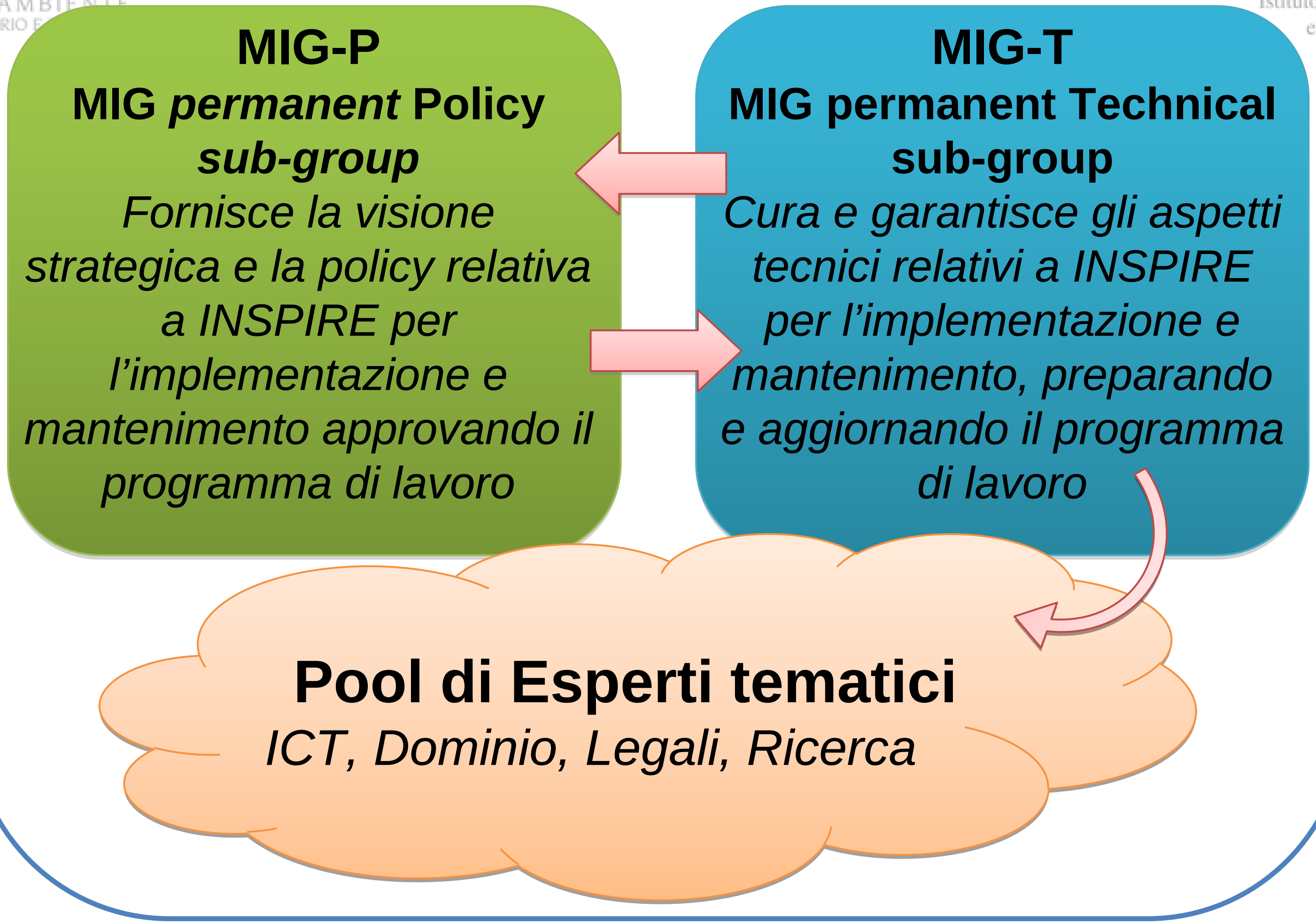
MIF?

Dove siamo?

Dove andiamo?

SUCCESS
FAILURE

INSPIRE MIF:
Framework per l'Implementazione e Mantenimento



MIG-P

MIG *permanent* Policy *sub-group*

Fornisce la visione strategica e la policy relativa a INSPIRE per l'implementazione e mantenimento approvando il programma di lavoro

MIG-T

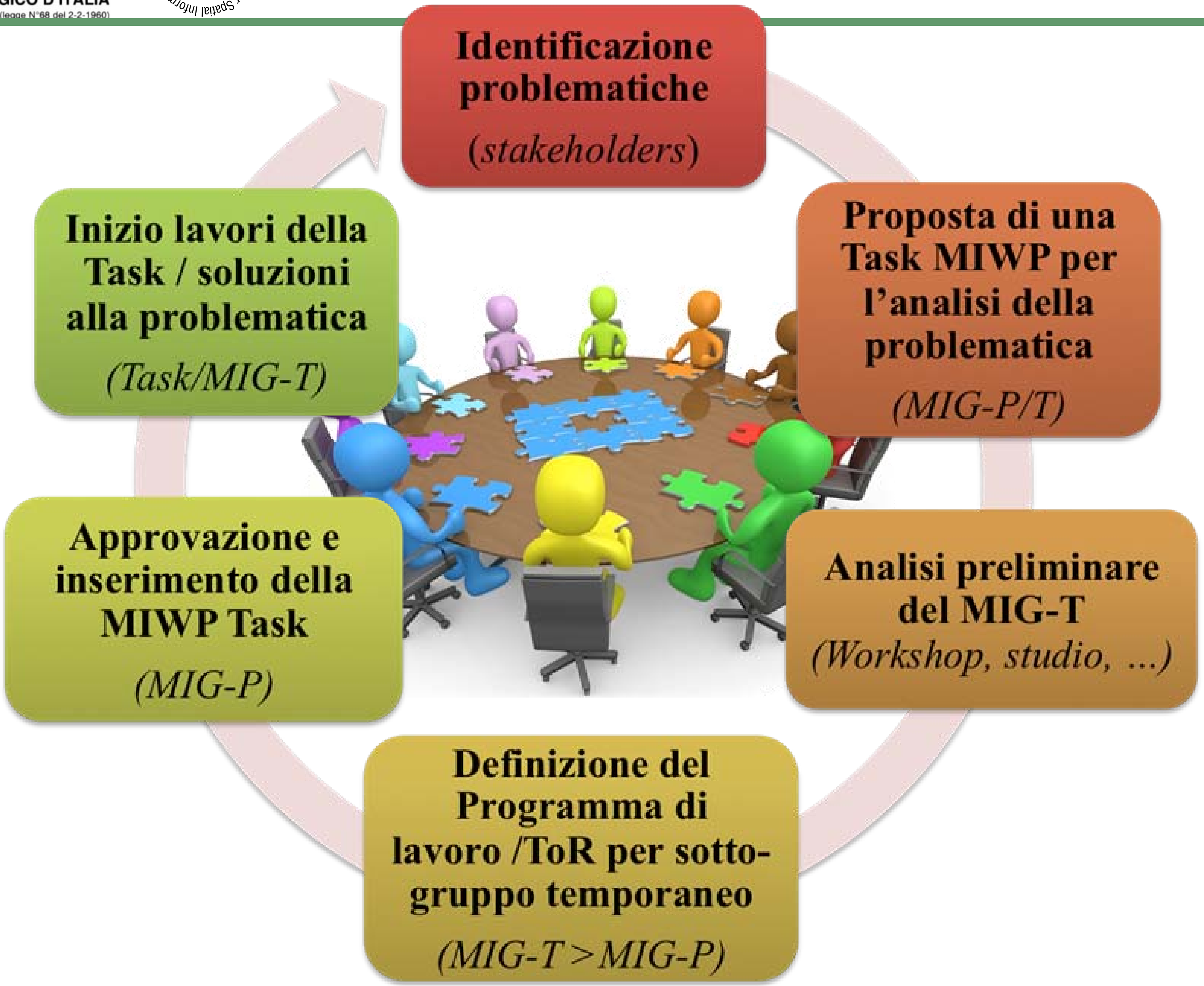
MIG permanent Technical sub-group

Cura e garantisce gli aspetti tecnici relativi a INSPIRE per l'implementazione e mantenimento, preparando e aggiornando il programma di lavoro

Pool di Esperti tematici

ICT, Dominio, Legali, Ricerca

Flusso di lavoro MIF



Identificazione problematiche
(stakeholders)

Proposta di una Task MIWP per l'analisi della problematica
(MIG-P/T)

Analisi preliminare del MIG-T
(Workshop, studio, …)

Definizione del Programma di lavoro /ToR per sotto-gruppo temporaneo
(MIG-T > MIG-P)

Approvazione e inserimento della MIWP Task
(MIG-P)

Inizio lavori della Task / soluzioni alla problematica
(Task/MIG-T)

MIWP attivati

WP 5 Validazione e test di conformità

WP 6 Registro e registrazione

WP 7a Estensione delle G.T. per i Download Service per SOS

WP 7b Estensione delle G.T. per i Download Service per Coverage

WP 8 Aggiornamento delle G.T. per i Metadati

WP 10 Aggiornamento delle Specifiche Dati dell'Annesso-I

WP 14 Esperienze implementative dei domini tematici e problematiche delle Specifiche Dati

WP 16 Migliorare usabilità e affidabilità delle informazioni di Monitoraggio

WP 18a Mantenimento e aggiornamento degli schemi XML Annex I

WP 21 Piloti su applicazioni basate su INSPIRE incluso eReporting

In corso di attivazione

WP 1 Migliorare e favorire l'accesso alle informazioni di INSPIRE

WP 2 Creare e mantenere una pagine delle FAQ

WP 3 Linee guida e buone pratiche per i processi di controllo all'accesso

WP 4 Gestione e uso delle http URI per gli indicativi referenziati INSPIRE

WP 7c Estensione delle G.T. per i Download Service per tabelle di dati

WP 9 Future direzioni del geoportale INSPIRE

WP 11 Codifica GML: Esplicazione e semplificazione della codifica GML per i dati spaziali

WP 12 Codifica GML: Esplicazioni delle regole di codifica da UML a GML

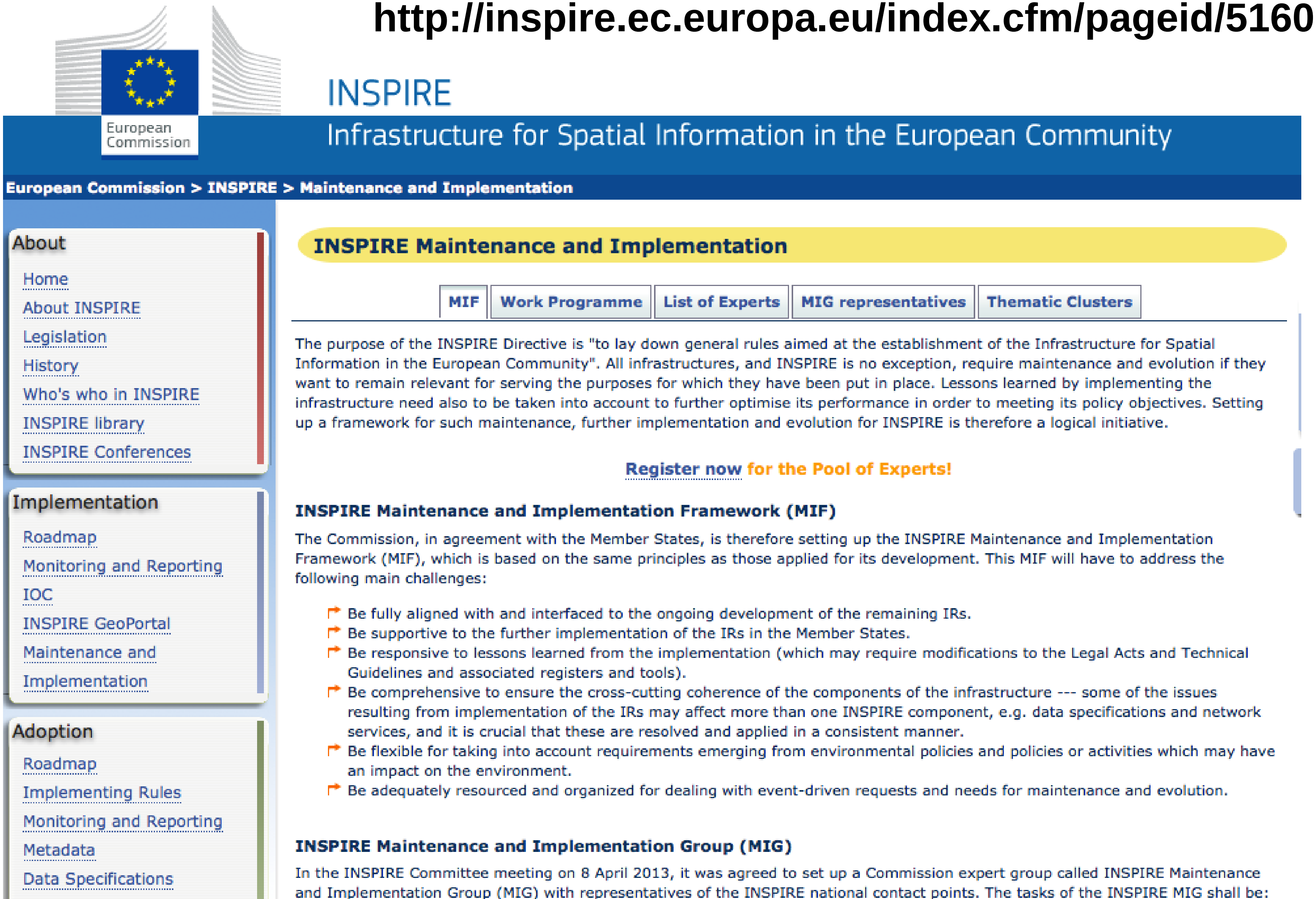
WP 15 Panoramica delle strutture di coordinamento, delle architetture e strumenti di INSPIRE

WP 17 Modello di licenza e scambio dati e servizi

WP 19 Migliorare e esplorare la piattaforma dei vocabolari controllati in INSPIRE

Accesso alle info …

http://inspire.ec.europa.eu/index.cfm/pageid/5160



INSPIRE

Infrastructure for Spatial Information in the European Community

European Commission

European Commission > INSPIRE > Maintenance and Implementation

About

- Home
- About INSPIRE
- Legislation
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- Who's who in INSPIRE
- INSPIRE library
- INSPIRE Conferences

Implementation

- Roadmap
- Monitoring and Reporting
- IOC
- INSPIRE GeoPortal
- Maintenance and Implementation

Adoption

- Roadmap
- Implementing Rules
- Monitoring and Reporting
- Metadata
- Data Specifications

INSPIRE Maintenance and Implementation

The purpose of the INSPIRE Directive is "to lay down general rules aimed at the establishment of the Infrastructure for Spatial Information in the European Community". All infrastructures, and INSPIRE is no exception, require maintenance and evolution if they want to remain relevant for serving the purposes for which they have been put in place. Lessons learned by implementing the infrastructure need also to be taken into account to further optimise its performance in order to meeting its policy objectives. Setting up a framework for such maintenance, further implementation and evolution for INSPIRE is therefore a logical initiative.

Register now for the Pool of Experts!

INSPIRE Maintenance and Implementation Framework (MIF)

The Commission, in agreement with the Member States, is therefore setting up the INSPIRE Maintenance and Implementation Framework (MIF), which is based on the same principles as those applied for its development. This MIF will have to address the following main challenges:

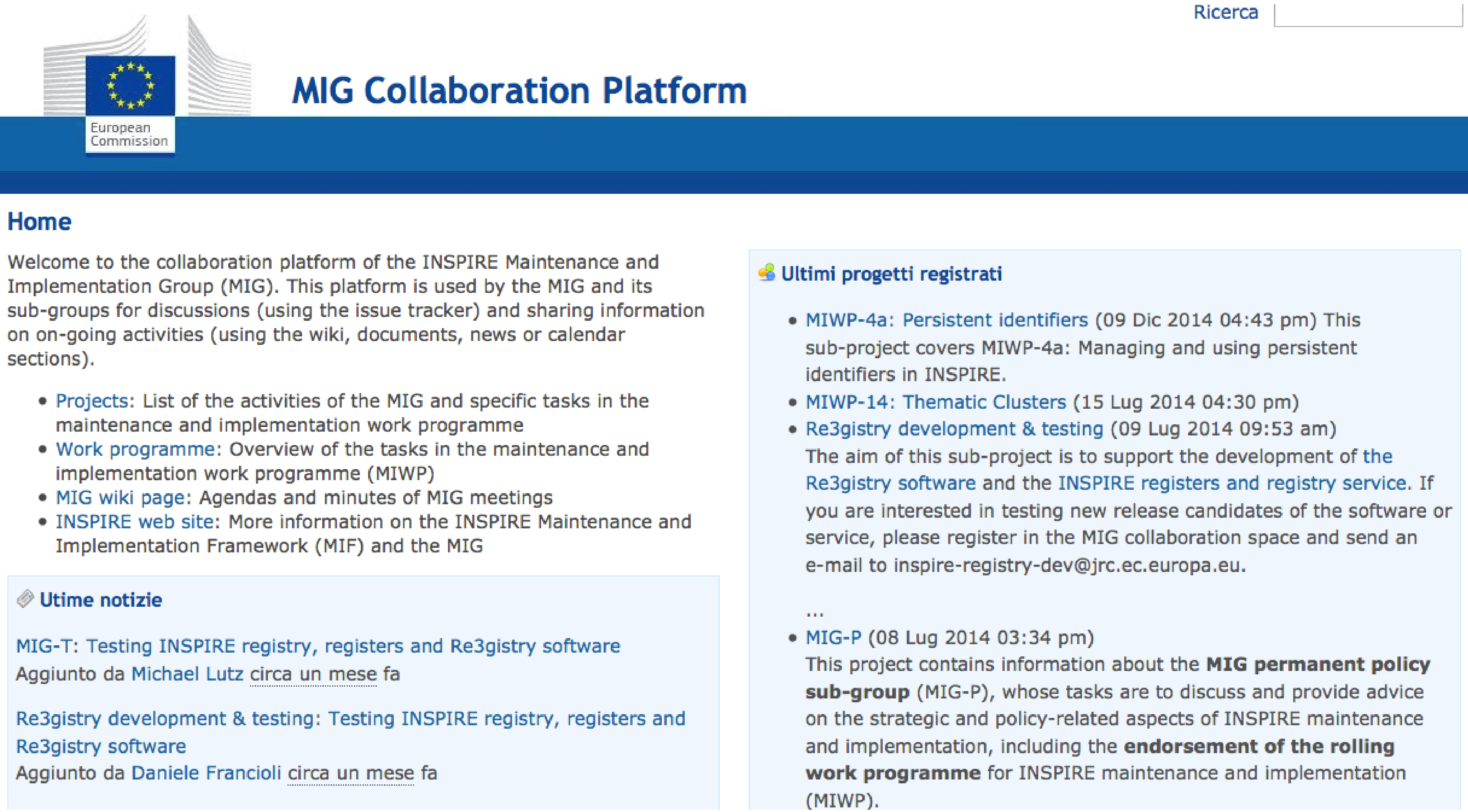
- Be fully aligned with and interfaced to the ongoing development of the remaining IRs.
- Be supportive to the further implementation of the IRs in the Member States.
- Be responsive to lessons learned from the implementation (which may require modifications to the Legal Acts and Technical Guidelines and associated registers and tools).
- Be comprehensive to ensure the cross-cutting coherence of the components of the infrastructure --- some of the issues resulting from implementation of the IRs may affect more than one INSPIRE component, e.g. data specifications and network services, and it is crucial that these are resolved and applied in a consistent manner.
- Be flexible for taking into account requirements emerging from environmental policies and policies or activities which may have an impact on the environment.
- Be adequately resourced and organized for dealing with event-driven requests and needs for maintenance and evolution.

INSPIRE Maintenance and Implementation Group (MIG)

In the INSPIRE Committee meeting on 8 April 2013, it was agreed to set up a Commission expert group called INSPIRE Maintenance and Implementation Group (MIG) with representatives of the INSPIRE national contact points. The tasks of the INSPIRE MIG shall be:

Accesso alle info …

https://ies-svn.jrc.ec.europa.eu/



Home

Welcome to the collaboration platform of the INSPIRE Maintenance and Implementation Group (MIG). This platform is used by the MIG and its sub-groups for discussions (using the issue tracker) and sharing information on on-going activities (using the wiki, documents, news or calendar sections).

- Projects: List of the activities of the MIG and specific tasks in the maintenance and implementation work programme
- Work programme: Overview of the tasks in the maintenance and implementation work programme (MIWP)
- MIG wiki page: Agendas and minutes of MIG meetings
- INSPIRE web site: More information on the INSPIRE Maintenance and Implementation Framework (MIF) and the MIG

Utime notizie

MIG-T: Testing INSPIRE registry, registers and Re3gistry software
Aggiunto da Michael Lutz circa un mese fa

Re3gistry development & testing: Testing INSPIRE registry, registers and Re3gistry software
Aggiunto da Daniele Francioli circa un mese fa

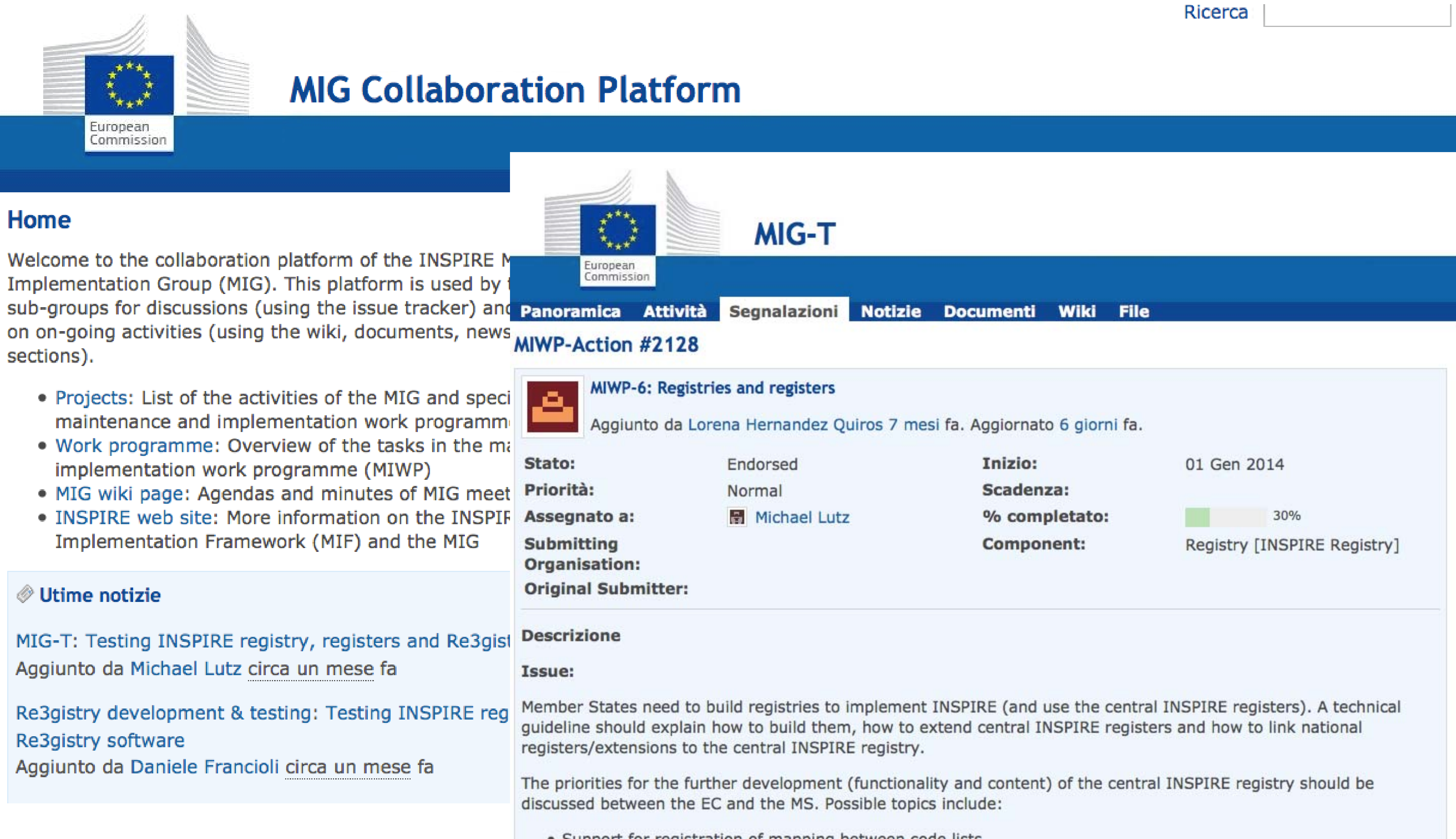
Ultimi progetti registrati

- MIWP-4a: Persistent identifiers (09 Dic 2014 04:43 pm) This sub-project covers MIWP-4a: Managing and using persistent identifiers in INSPIRE.
- MIWP-14: Thematic Clusters (15 Lug 2014 04:30 pm)
- Re3gistry development & testing (09 Lug 2014 09:53 am) The aim of this sub-project is to support the development of the Re3gistry software and the INSPIRE registers and registry service. If you are interested in testing new release candidates of the software or service, please register in the MIG collaboration space and send an e-mail to inspire-registry-dev@jrc.ec.europa.eu.

  ...
- MIG-P (08 Lug 2014 03:34 pm) This project contains information about the **MIG permanent policy sub-group** (MIG-P), whose tasks are to discuss and provide advice on the strategic and policy-related aspects of INSPIRE maintenance and implementation, including the **endorsement of the rolling work programme** for INSPIRE maintenance and implementation (MIWP).

Accesso alle info …

https://ies-svn.jrc.ec.europa.eu/



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Re3gistry software
Aggiunto da Daniele Francioli circa un mese fa

MIWP-Action #2128

MIWP-6: Registries and registers

Aggiunto da Lorena Hernandez Quiros 7 mesi fa. Aggiornato 6 giorni fa.

Stato:	Endorsed	**Inizio:**	01 Gen 2014
Priorità:	Normal	**Scadenza:**	
Assegnato a:	Michael Lutz	**% completato:**	30%
Submitting Organisation:		**Component:**	Registry [INSPIRE Registry]
Original Submitter:			

Descrizione

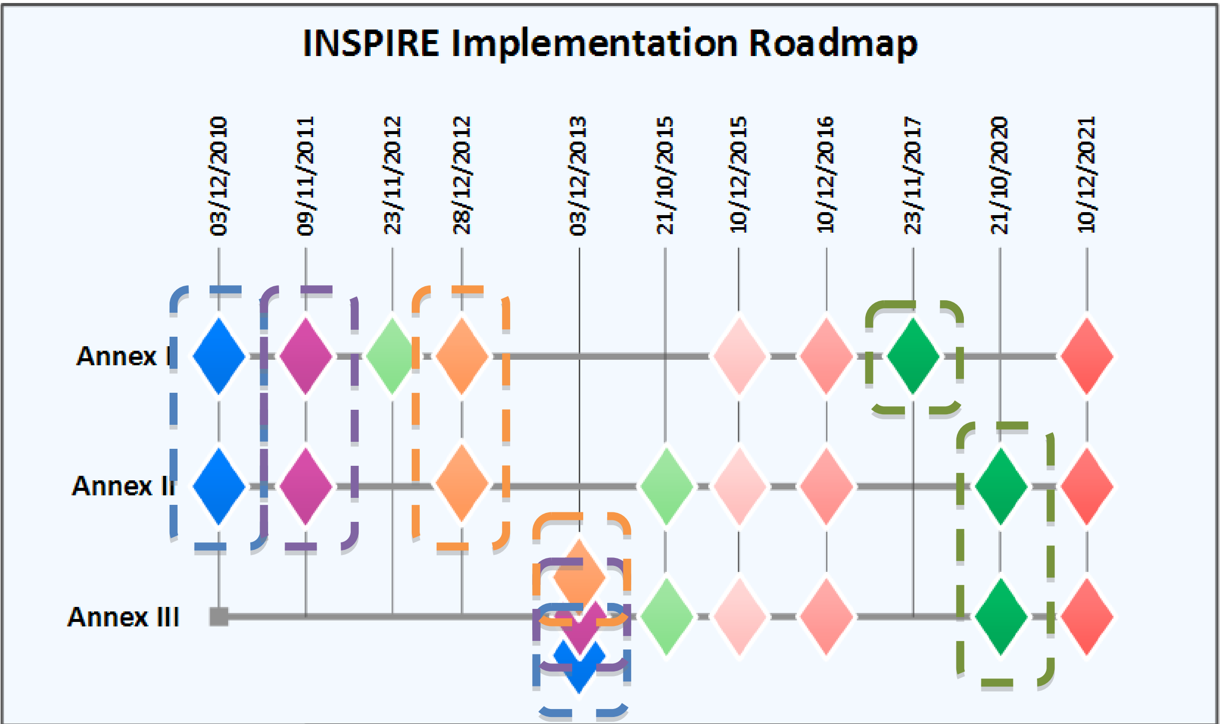
Issue:

Member States need to build registries to implement INSPIRE (and use the central INSPIRE registers). A technical guideline should explain how to build them, how to extend central INSPIRE registers and how to link national registers/extensions to the central INSPIRE registry.

The priorities for the further development (functionality and content) of the central INSPIRE registry should be discussed between the EC and the MS. Possible topics include:

- Support for registration of mapping between code lists

Roadmap ITA


INSPIRE Implementation Roadmap

◆ **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**)

Metadati

Annex I e II 24/12/2010
Annex III 24/12/2013

Discovery - View Service

Annex I e II 24/12/2011
Annex III 24/12/2013

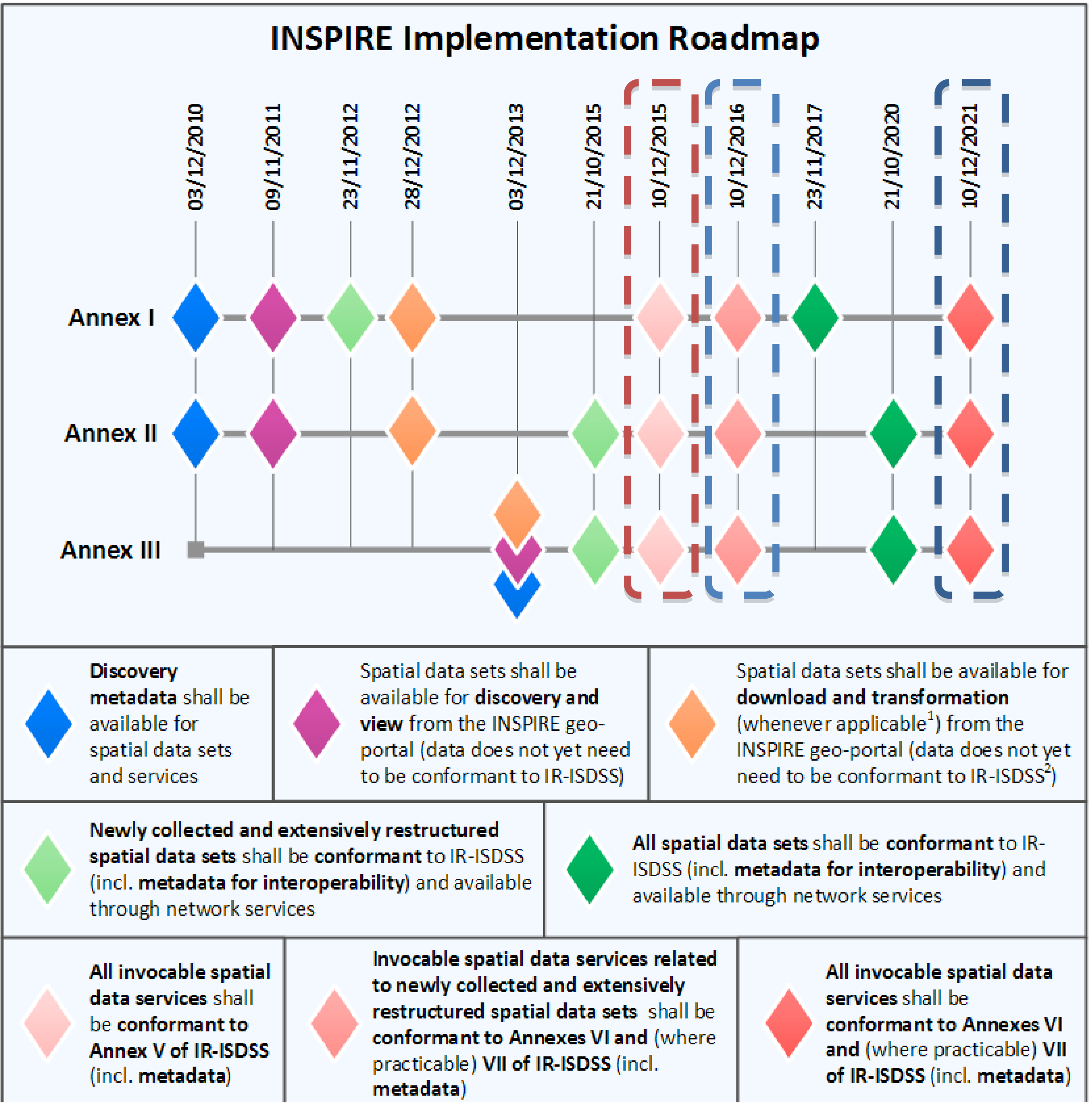
Download Service

Annex I e II 24/12/2012
Annex III 24/12/2013

Dataset

Annex I 24/11/2017
Annex II e III 24/10/2020

SDS – Spatial Data Services



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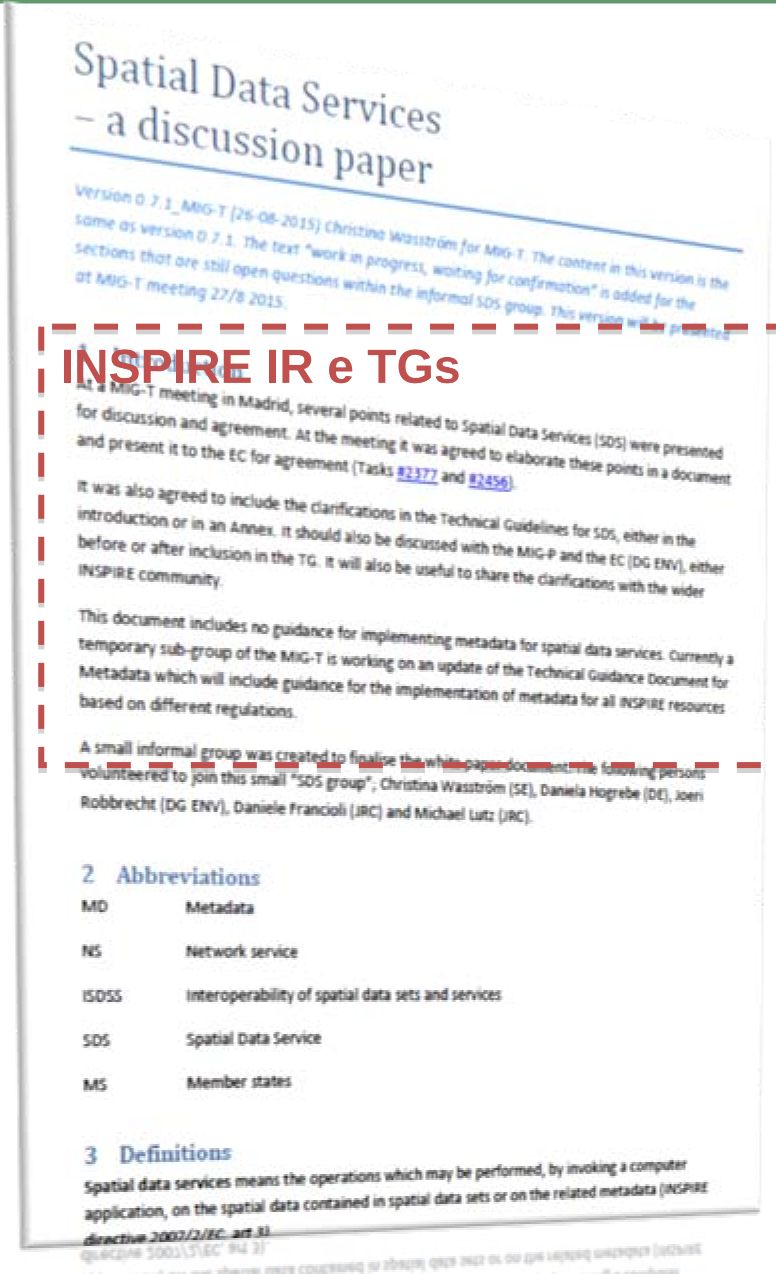
- *Elementi INSPIRE dei metadati*
- *Interoperabilità degli Spatial Data Services*

SDS – Spatial Data Services



Spatial Data Services – a discussion paper

Version 0.7.1_MIG-T (26-08-2015) Christina Wasström for MIG-T. The content in this version is the same as version 0.7.1. The text "work in progress, waiting for confirmation" is added for the sections that are still open questions within the informal SDS group. This version will be presented at MIG-T meeting 27/8 2015.

1 Introduction

At a MIG-T meeting in Madrid, several points related to Spatial Data Services (SDS) were presented for discussion and agreement. At the meeting it was agreed to elaborate these points in a document and present it to the EC for agreement (Tasks #2377 and #2456).

It was also agreed to include the clarifications in the Technical Guidelines for SDS, either in the introduction or in an Annex. It should also be discussed with the MIG-P and the EC (DG ENV), either before or after inclusion in the TG. It will also be useful to share the clarifications with the wider INSPIRE community.

This document includes no guidance for implementing metadata for spatial data services. Currently a temporary sub-group of the MIG-T is working on an update of the Technical Guidance Document for Metadata which will include guidance for the implementation of metadata for all INSPIRE resources based on different regulations.

A small informal group was created to finalise the white paper document. The following persons volunteered to join this small "SDS group": Christina Wasström (SE), Daniela Hogrebe (DE), Joeri Robbrecht (DG ENV), Daniele Francioli (JRC) and Michael Lutz (JRC).

2 Abbreviations

MD	Metadata
NS	Network service
ISDSS	Interoperability of spatial data sets and services
SDS	Spatial Data Service
MS	Member states

3 Definitions

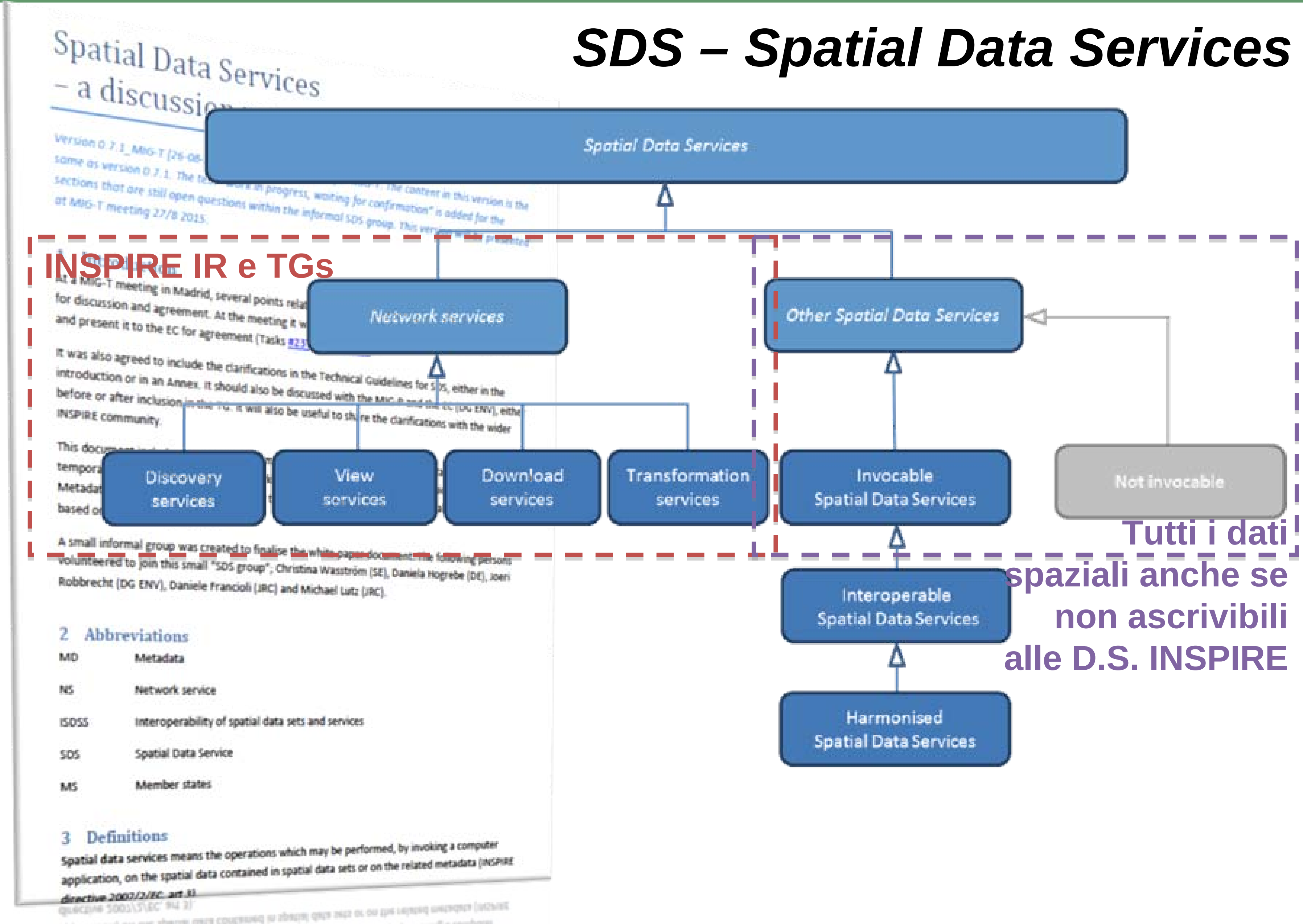
Spatial data services means the operations which may be performed, by invoking a computer application, on the spatial data contained in spatial data sets or on the related metadata (*INSPIRE directive 2007/2/EC, art 3*)

INSPIRE IR e TGs

Tutti i dati spaziali anche se non ascrivibili alle D.S. INSPIRE

Hot Topic

SDS – Spatial Data Services



Spatial Data Services
– a discussion

Version 0.7.1_MIG-T (26-08- "work in progress, waiting for confirmation" is added for the The content in this version is the
same as version 0.7.1. The te
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Spatial Data Services
Network services
Other Spatial Data Services
Discovery services
View services
Download services
Transformation services
Invocable Spatial Data Services
Not invocable
Interoperable Spatial Data Services
Harmonised Spatial Data Services

INSPIRE IR e TGs

Tutti i dati spaziali anche se non ascrivibili alle D.S. INSPIRE

Evoluzione metadati

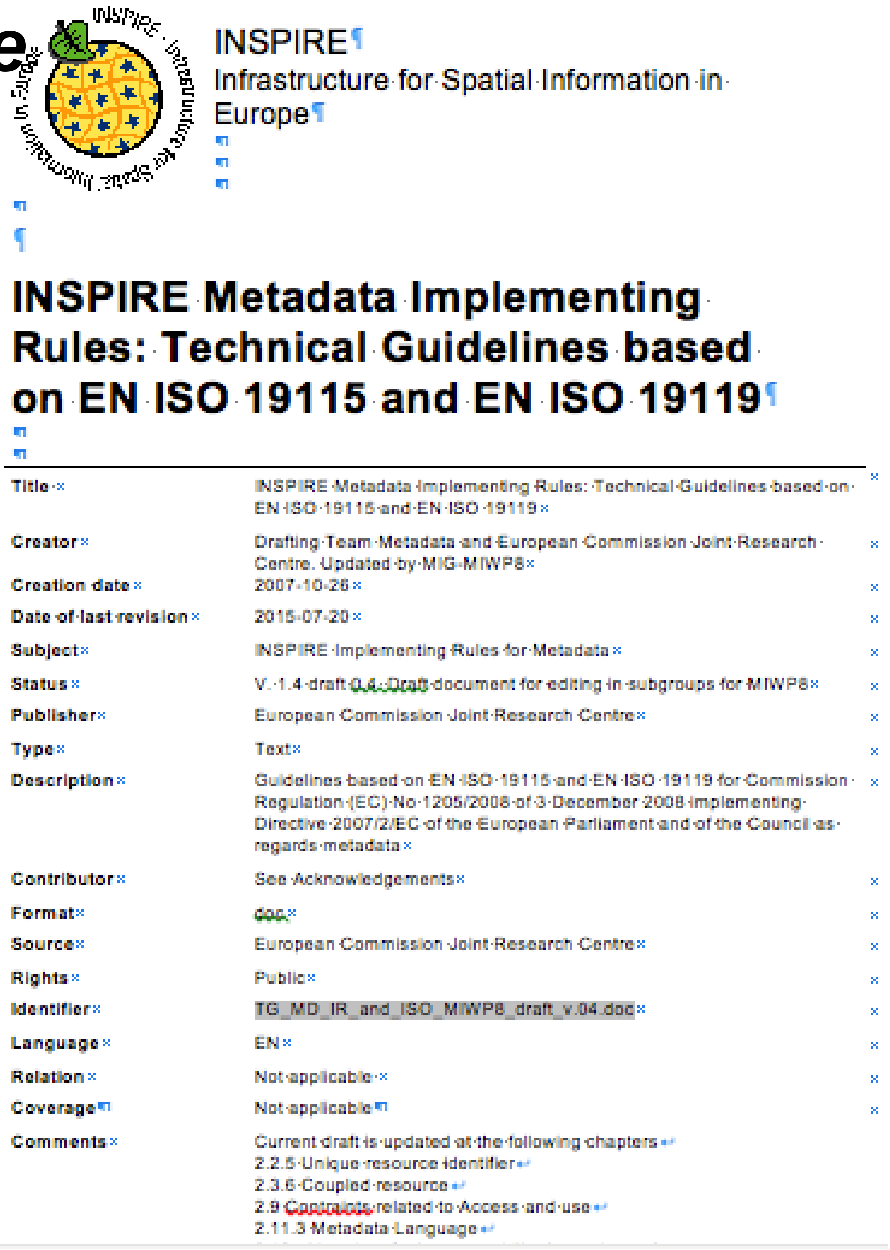
TGs per i metadati integrate

Issues in Release A June 20th 2015

MIWP-8 (J) Metadata for SDS (draft)
MIWP-8 (D) Integrate metadata for interoperability into the Metadata TG (draft)
MIWP-8 (I) Language neutral identifiers (draft)
MIWP-8 (L) Unique Resource Identifier (draft)
MIWP-8 (M) Coupled resources (draft)
MIWP-8 (E-1) Integrate Theme specific metadata (draft)
MIWP-8 (A) Conditions applying to access and use (draft)

Issues in Release B December 20th 2015

MIWP-8 (C) Harmonized restrictions/licenses
MIWP-8 (E-2) Integrate Theme specific metadata
MIWP-8 (F) Relation to ISO19115-1:2014
MIWP-8 (G) Conformance classes in registry
MIWP-8 (H) Metadata for monitoring
MIWP-8 (K) Add Abstract Test suite



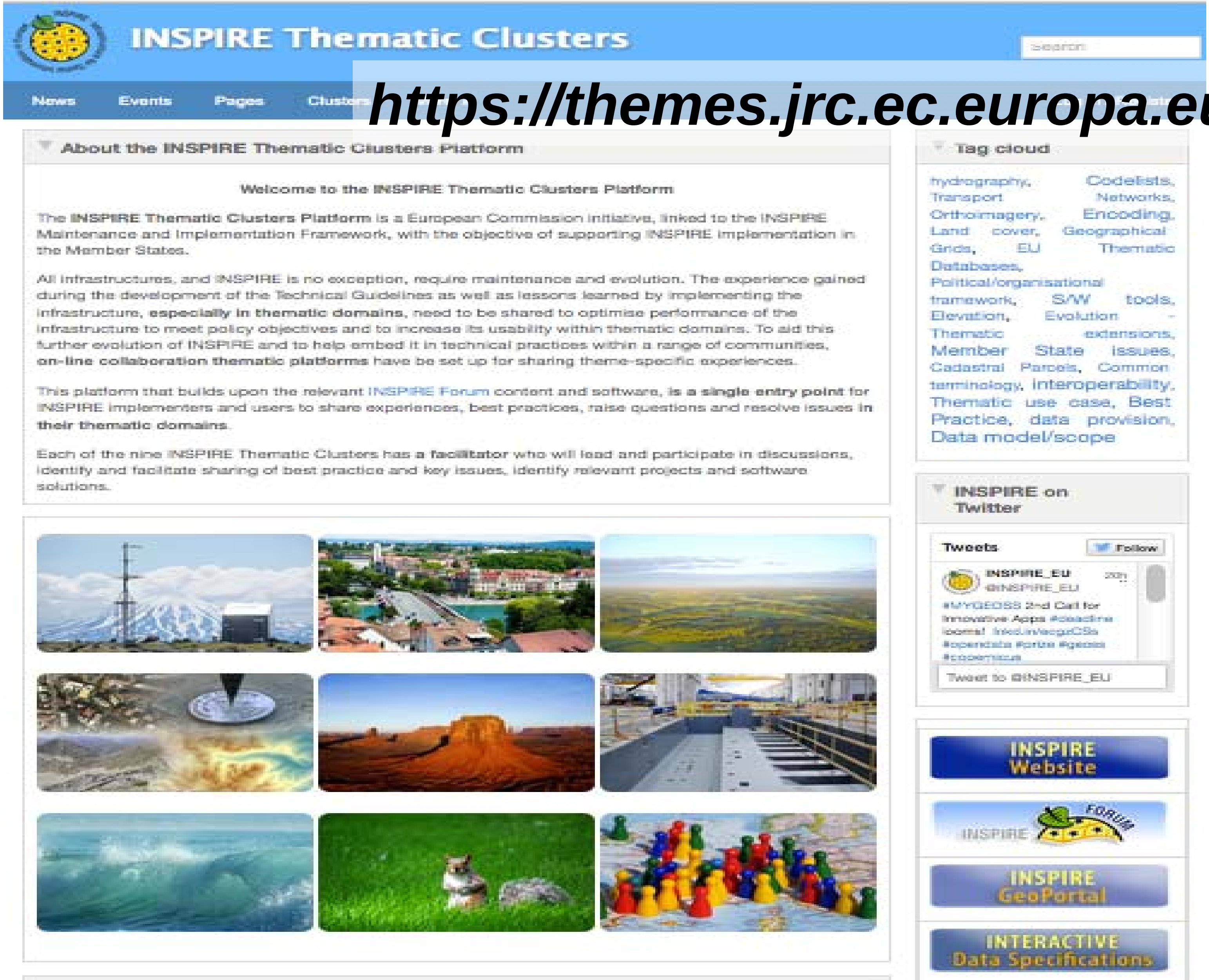
INSPIRE
Infrastructure for Spatial Information in Europe

INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119

Title	INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119
Creator	Drafting Team Metadata and European Commission Joint Research Centre. Updated by MIG-MIWP8
Creation date	2007-10-26
Date of last revision	2015-07-20
Subject	INSPIRE Implementing Rules for Metadata
Status	V. 1.4 draft 0.4. Draft document for editing in subgroups for MIWP8
Publisher	European Commission Joint Research Centre
Type	Text
Description	Guidelines based on EN ISO 19115 and EN ISO 19119 for Commission Regulation (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata
Contributor	See Acknowledgements
Format	doc
Source	European Commission Joint Research Centre
Rights	Public
Identifier	TG_MD_IR_and_ISO_MIWP8_draft_v.04.doc
Language	EN
Relation	Not applicable
Coverage	Not applicable
Comments	Current draft is updated at the following chapters 2.2.5 Unique resource identifier 2.3.6 Coupled resource 2.9 Contraints related to Access and use 2.11.3 Metadata Language

Cluster Tematico

https://themes.jrc.ec.europa.eu/


INSPIRE Thematic Clusters
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Pages
Clusters

About the INSPIRE Thematic Clusters Platform

Welcome to the INSPIRE Thematic Clusters Platform

The **INSPIRE Thematic Clusters Platform** is a European Commission initiative, linked to the INSPIRE Maintenance and Implementation Framework, with the objective of supporting INSPIRE implementation in the Member States.

All infrastructures, and INSPIRE is no exception, require maintenance and evolution. The experience gained during the development of the Technical Guidelines as well as lessons learned by implementing the infrastructure, **especially in thematic domains**, need to be shared to optimise performance of the infrastructure to meet policy objectives and to increase its usability within thematic domains. To aid this further evolution of INSPIRE and to help embed it in technical practices within a range of communities, **on-line collaboration thematic platforms** have be set up for sharing theme-specific experiences.

This platform that builds upon the relevant INSPIRE Forum content and software, **is a single entry point** for INSPIRE implementers and users to share experiences, best practices, raise questions and resolve issues **in their thematic domains**.

Each of the nine INSPIRE Thematic Clusters has **a facilitator** who will lead and participate in discussions, identify and facilitate sharing of best practice and key issues, identify relevant projects and software solutions.

Tag cloud

hydrography, Codelists, Transport Networks, Orthoimagery, Encoding, Land cover, Geographical Grids, EU Thematic Databases, Political/organisational framework, S/W tools, Elevation, Evolution - Thematic extensions, Member State issues, Cadastral Parcels, Common terminology, Interoperability, Thematic use case, Best Practice, data provision, Data model/scope

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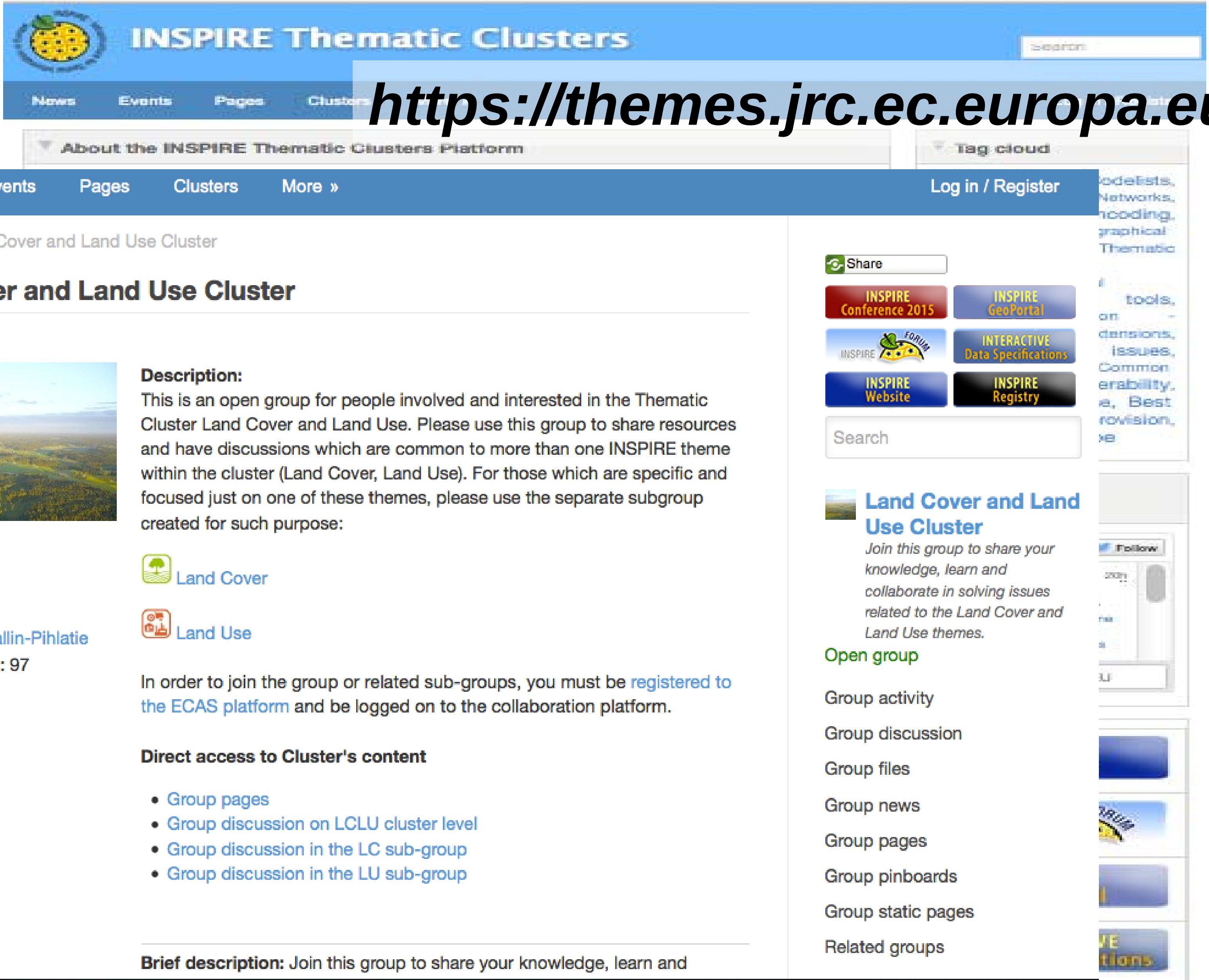
INSPIRE FORUM
INSPIRE GeoPortal
INTERACTIVE Data Specifications

Cluster Tematico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Groups > Land Cover and Land Use Cluster

Land Cover and Land Use Cluster

Image Owner Credit

Description:
This is an open group for people involved and interested in the Thematic Cluster Land Cover and Land Use. Please use this group to share resources and have discussions which are common to more than one INSPIRE theme within the cluster (Land Cover, Land Use). For those which are specific and focused just on one of these themes, please use the separate subgroup created for such purpose:

Land Cover

Land Use

Owner: Lena Hallin-Pihlatie
Group members: 97
Open group
Login to Join

In order to join the group or related sub-groups, you must be registered to the ECAS platform and be logged on to the collaboration platform.

Direct access to Cluster's content

- Group pages
- Group discussion on LCLU cluster level
- Group discussion in the LC sub-group
- Group discussion in the LU sub-group

Brief description: Join this group to share your knowledge, learn and

Share
INSPIRE Conference 2015
INSPIRE GeoPortal
INSPIRE FORUM
INTERACTIVE Data Specifications
INSPIRE Website
INSPIRE Registry
Search

Land Cover and Land Use Cluster

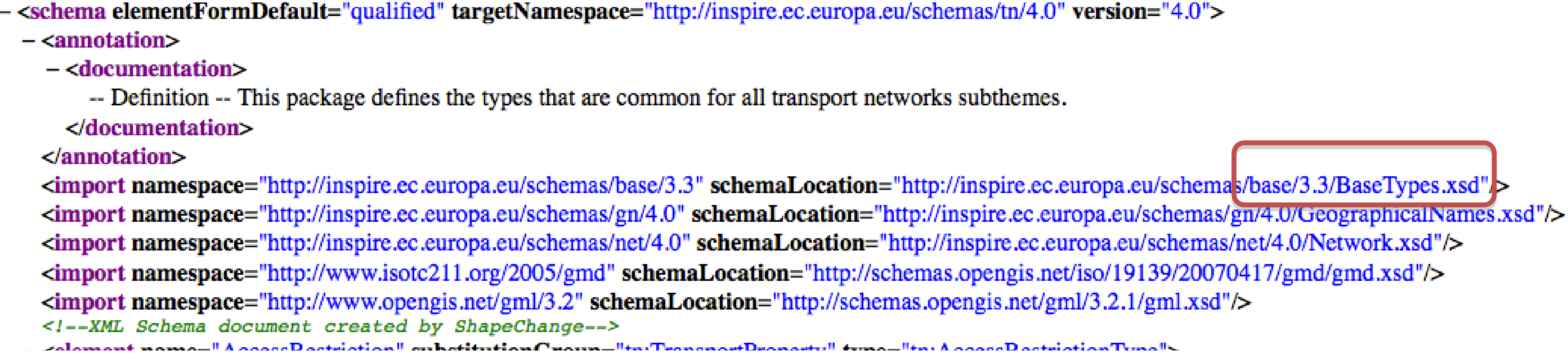
Join this group to share your knowledge, learn and collaborate in solving issues related to the Land Cover and Land Use themes.

Open group

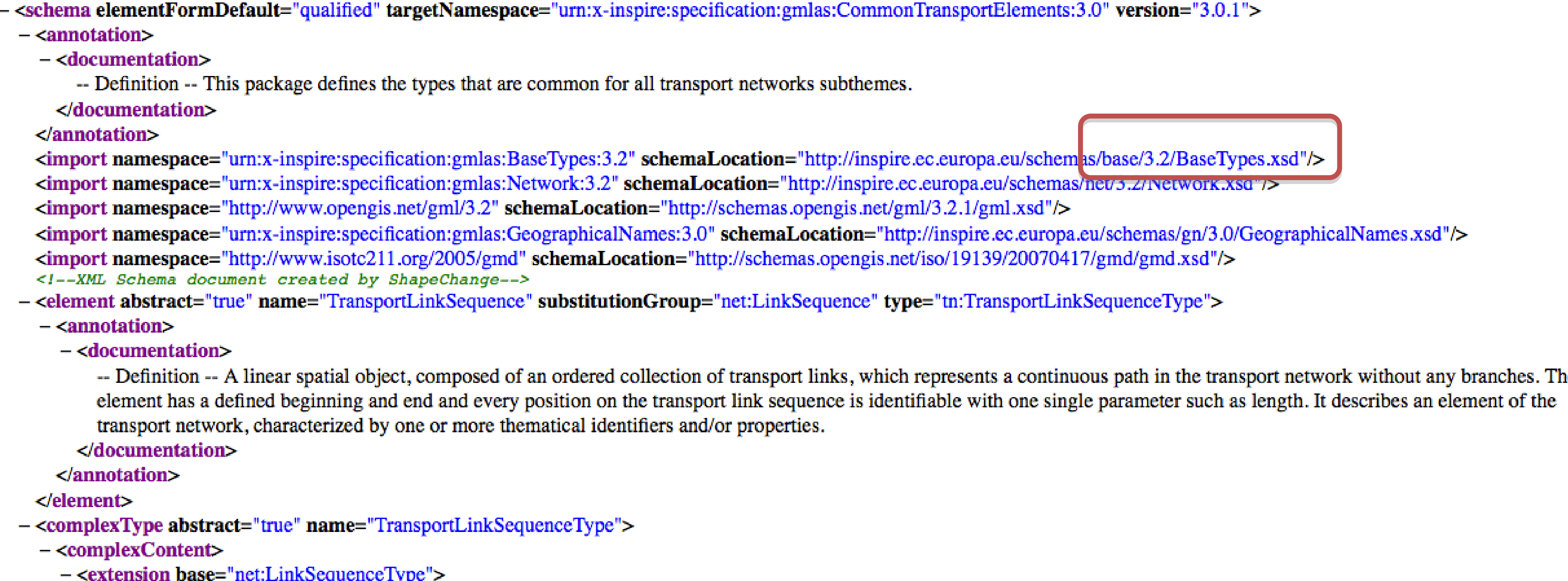
- Group activity
- Group discussion
- Group files
- Group news
- Group pages
- Group pinboards
- Group static pages
- Related groups

Evoluzione schema

Nuovo schema dati

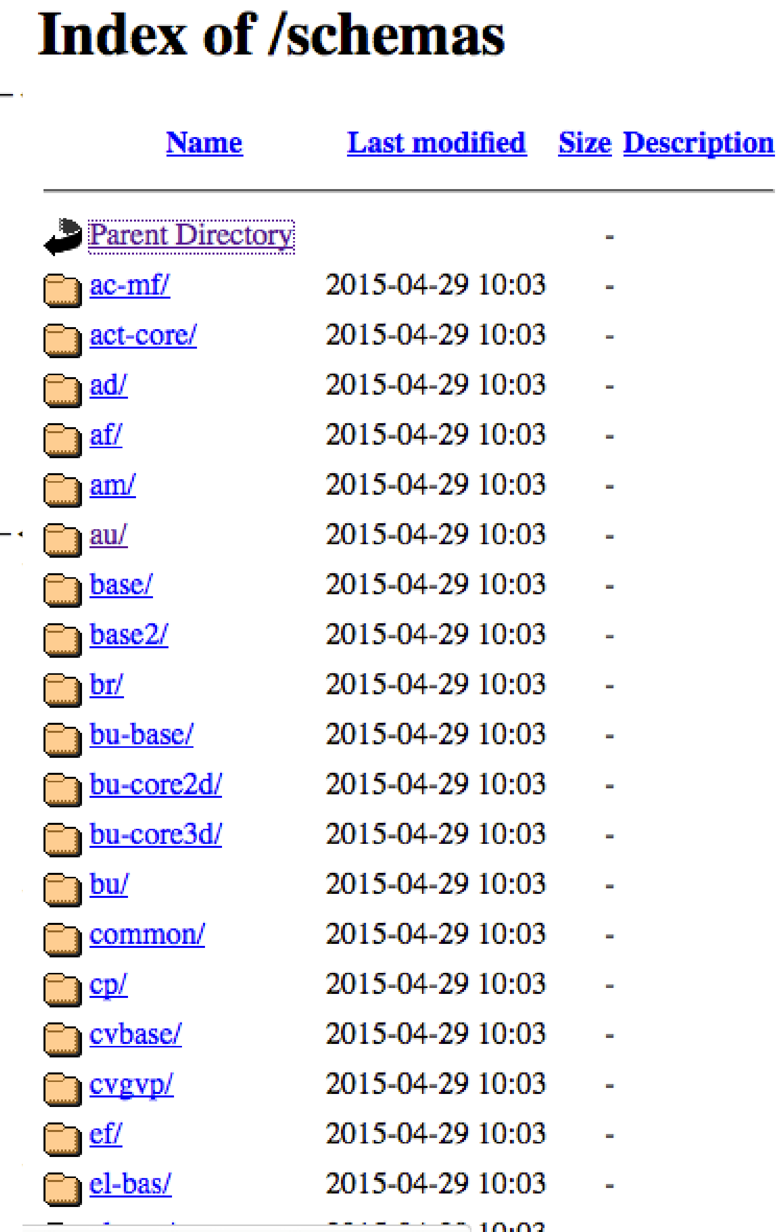


```
– <schema elementFormDefault="qualified" targetNamespace="http://inspire.ec.europa.eu/schemas/tn/4.0" version="4.0">
  – <annotation>
    – <documentation>
        -- Definition -- This package defines the types that are common for all transport networks subthemes.
      </documentation>
    </annotation>
    <import namespace="http://inspire.ec.europa.eu/schemas/base/3.3" schemaLocation="http://inspire.ec.europa.eu/schemas/base/3.3/BaseTypes.xsd"/>
    <import namespace="http://inspire.ec.europa.eu/schemas/gn/4.0" schemaLocation="http://inspire.ec.europa.eu/schemas/gn/4.0/GeographicalNames.xsd"/>
    <import namespace="http://inspire.ec.europa.eu/schemas/net/4.0" schemaLocation="http://inspire.ec.europa.eu/schemas/net/4.0/Network.xsd"/>
    <import namespace="http://www.isotc211.org/2005/gmd" schemaLocation="http://schemas.opengis.net/iso/19139/20070417/gmd/gmd.xsd"/>
    <import namespace="http://www.opengis.net/gml/3.2" schemaLocation="http://schemas.opengis.net/gml/3.2.1/gml.xsd"/>
    <!--XML Schema document created by ShapeChange-->
    <element name="AccessRestriction" substitutionGroup="tn:TransportProperty" type="tn:AccessRestrictionType">
```



```
– <schema elementFormDefault="qualified" targetNamespace="urn:x-inspire:specification:gmlas:CommonTransportElements:3.0" version="3.0.1">
  – <annotation>
    – <documentation>
        -- Definition -- This package defines the types that are common for all transport networks subthemes.
      </documentation>
    </annotation>
    <import namespace="urn:x-inspire:specification:gmlas:BaseTypes:3.2" schemaLocation="http://inspire.ec.europa.eu/schemas/base/3.2/BaseTypes.xsd"/>
    <import namespace="urn:x-inspire:specification:gmlas:Network:3.2" schemaLocation="http://inspire.ec.europa.eu/schemas/net/3.2/Network.xsd"/>
    <import namespace="http://www.opengis.net/gml/3.2" schemaLocation="http://schemas.opengis.net/gml/3.2.1/gml.xsd"/>
    <import namespace="urn:x-inspire:specification:gmlas:GeographicalNames:3.0" schemaLocation="http://inspire.ec.europa.eu/schemas/gn/3.0/GeographicalNames.xsd"/>
    <import namespace="http://www.isotc211.org/2005/gmd" schemaLocation="http://schemas.opengis.net/iso/19139/20070417/gmd/gmd.xsd"/>
    <!--XML Schema document created by ShapeChange-->
  – <element abstract="true" name="TransportLinkSequence" substitutionGroup="net:LinkSequence" type="tn:TransportLinkSequenceType">
    – <annotation>
      – <documentation>
          -- Definition -- A linear spatial object, composed of an ordered collection of transport links, which represents a continuous path in the transport network without any branches. Th
          element has a defined beginning and end and every position on the transport link sequence is identifiable with one single parameter such as length. It describes an element of the
          transport network, characterized by one or more thematical identifiers and/or properties.
        </documentation>
      </annotation>
    </element>
  – <complexType abstract="true" name="TransportLinkSequenceType">
    – <complexContent>
      – <extension base="net:LinkSequenceType">
```

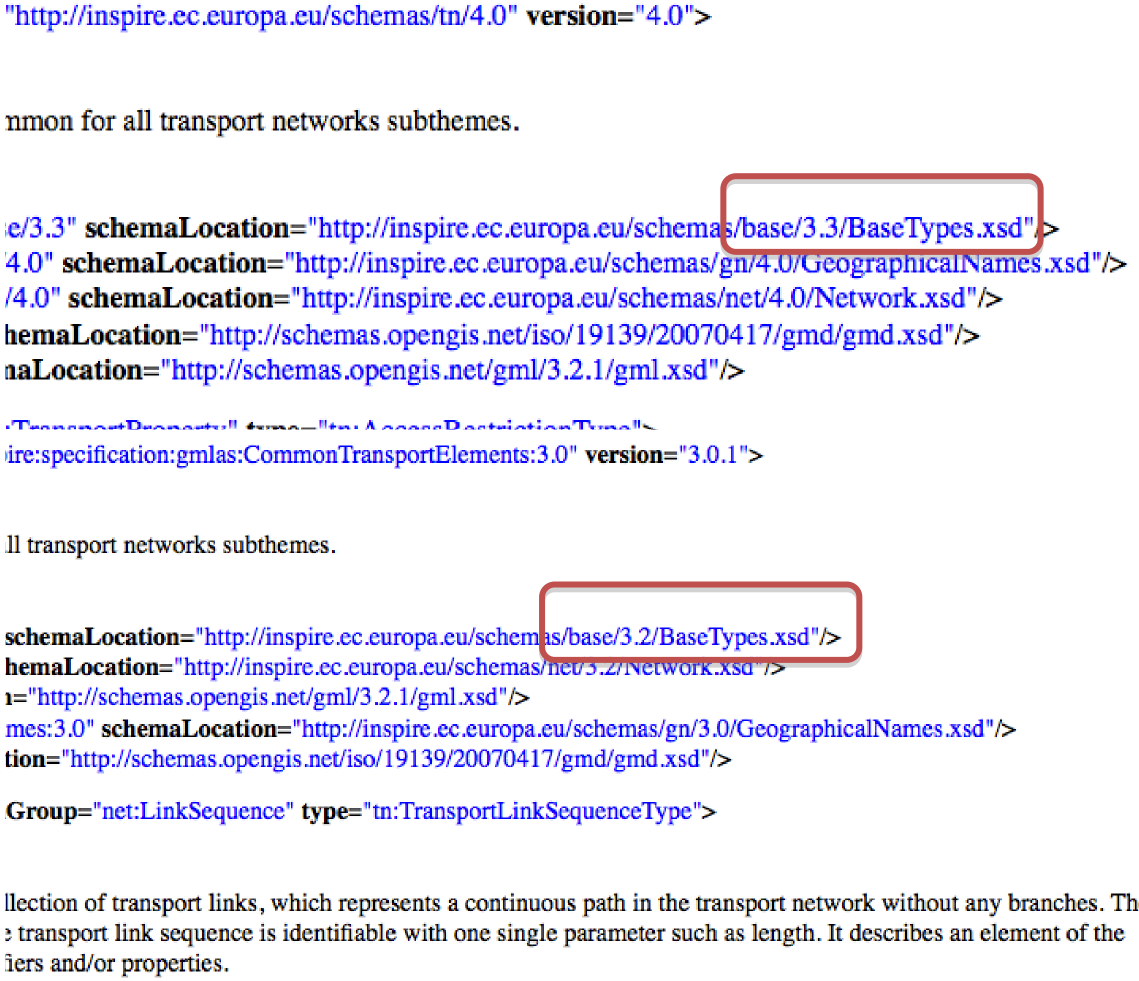
Evoluzione schema



Index of /schemas

Name	Last modified	Size	Description
Parent Directory		-	
ac-mf/	2015-04-29 10:03	-	
act-core/	2015-04-29 10:03	-	
ad/	2015-04-29 10:03	-	
af/	2015-04-29 10:03	-	
am/	2015-04-29 10:03	-	
au/	2015-04-29 10:03	-	
base/	2015-04-29 10:03	-	
base2/	2015-04-29 10:03	-	
br/	2015-04-29 10:03	-	
bu-base/	2015-04-29 10:03	-	
bu-core2d/	2015-04-29 10:03	-	
bu-core3d/	2015-04-29 10:03	-	
bu/	2015-04-29 10:03	-	
common/	2015-04-29 10:03	-	
cp/	2015-04-29 10:03	-	
cvbase/	2015-04-29 10:03	-	
cvgvp/	2015-04-29 10:03	-	
ef/	2015-04-29 10:03	-	
el-bas/	2015-04-29 10:03	-	

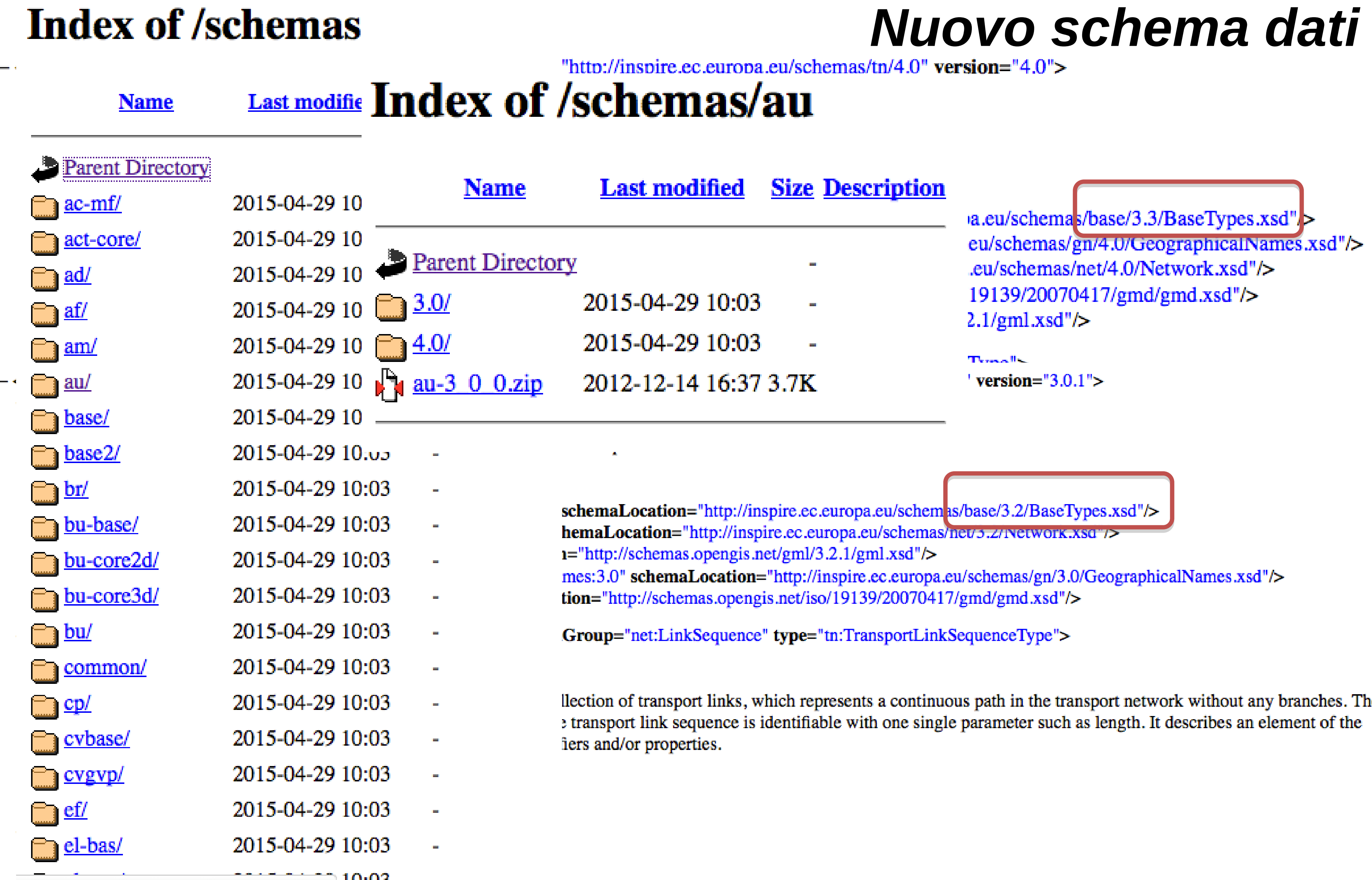
Nuovo schema dati



```
"http://inspire.ec.europa.eu/schemas/tn/4.0" version="4.0">

nmon for all transport networks subthemes.

e/3.3" schemaLocation="http://inspire.ec.europa.eu/schemas/base/3.3/BaseTypes.xsd"/>
4.0" schemaLocation="http://inspire.ec.europa.eu/schemas/gn/4.0/GeographicalNames.xsd"/>
/4.0" schemaLocation="http://inspire.ec.europa.eu/schemas/net/4.0/Network.xsd"/>
hemaLocation="http://schemas.opengis.net/iso/19139/20070417/gmd/gmd.xsd"/>
naLocation="http://schemas.opengis.net/gml/3.2.1/gml.xsd"/>

:TransportProperty" type="tn:AccessRestrictionType">
ire:specification:gmlas:CommonTransportElements:3.0" version="3.0.1">

ll transport networks subthemes.

schemaLocation="http://inspire.ec.europa.eu/schemas/base/3.2/BaseTypes.xsd"/>
hemaLocation="http://inspire.ec.europa.eu/schemas/net/3.2/Network.xsd"/>
1="http://schemas.opengis.net/gml/3.2.1/gml.xsd"/>
mes:3.0" schemaLocation="http://inspire.ec.europa.eu/schemas/gn/3.0/GeographicalNames.xsd"/>
tion="http://schemas.opengis.net/iso/19139/20070417/gmd/gmd.xsd"/>

Group="net:LinkSequence" type="tn:TransportLinkSequenceType">

llection of transport links, which represents a continuous path in the transport network without any branches. Th
e transport link sequence is identifiable with one single parameter such as length. It describes an element of the
iers and/or properties.
```

Evoluzione schema

Nuovo schema dati



Index of /schemas

```
Name              Last modifie
Parent Directory
ac-mf/            2015-04-29 10
act-core/         2015-04-29 10
ad/               2015-04-29 10
af/               2015-04-29 10
am/               2015-04-29 10
au/               2015-04-29 10
base/             2015-04-29 10
base2/            2015-04-29 10:03   -
br/               2015-04-29 10:03   -
bu-base/          2015-04-29 10:03   -
bu-core2d/        2015-04-29 10:03   -
bu-core3d/        2015-04-29 10:03   -
bu/               2015-04-29 10:03   -
common/           2015-04-29 10:03   -
cp/               2015-04-29 10:03   -
cvbase/           2015-04-29 10:03   -
cvgvp/            2015-04-29 10:03   -
ef/               2015-04-29 10:03   -
el-bas/           2015-04-29 10:03   -
```

Index of /schemas/au

```
Name              Last modified      Size Description
Parent Directory                     -
3.0/              2015-04-29 10:03   -
4.0/              2015-04-29 10:03   -
au-3_0_0.zip      2012-12-14 16:37   3.7K
```

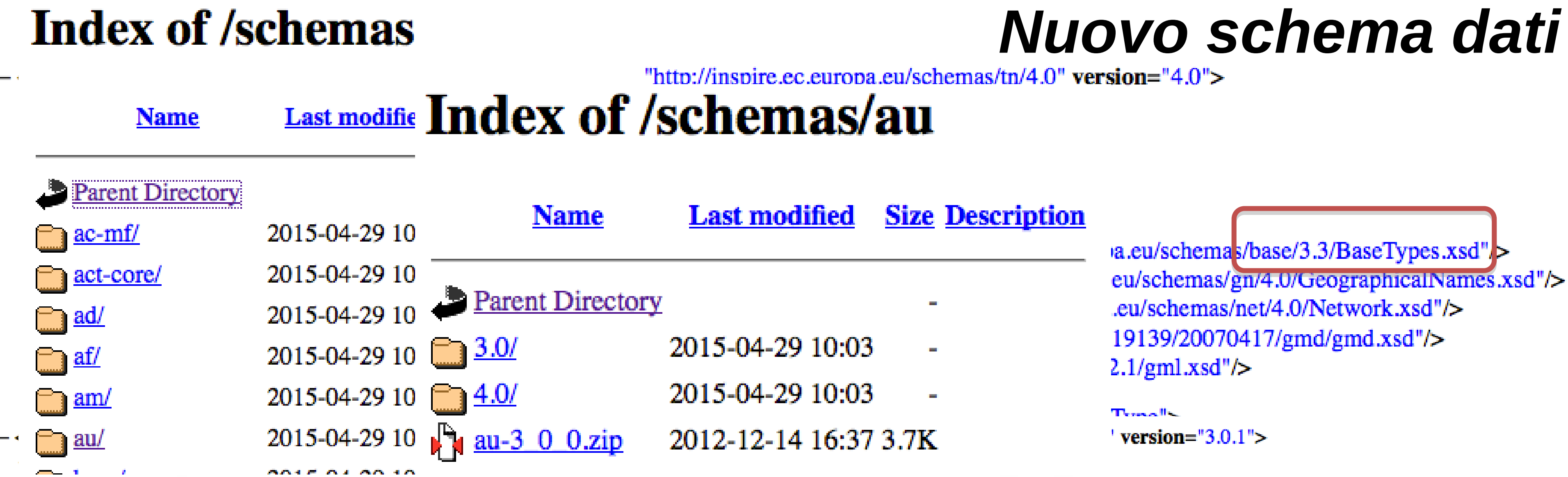
```
"http://inspire.ec.europa.eu/schemas/tn/4.0" version="4.0">
a.eu/schemas/base/3.3/BaseTypes.xsd"/>
eu/schemas/gn/4.0/GeographicalNames.xsd"/>
.eu/schemas/net/4.0/Network.xsd"/>
19139/20070417/gmd/gmd.xsd"/>
2.1/gml.xsd"/>

' version="3.0.1">
```

```
schemaLocation="http://inspire.ec.europa.eu/schemas/base/3.2/BaseTypes.xsd"/>
hemaLocation="http://inspire.ec.europa.eu/schemas/net/3.2/Network.xsd"/>
ı="http://schemas.opengis.net/gml/3.2.1/gml.xsd"/>
mes:3.0" schemaLocation="http://inspire.ec.europa.eu/schemas/gn/3.0/GeographicalNames.xsd"/>
tion="http://schemas.opengis.net/iso/19139/20070417/gmd/gmd.xsd"/>

Group="net:LinkSequence" type="tn:TransportLinkSequenceType">
```

llection of transport links, which represents a continuous path in the transport network without any branches. Th
: transport link sequence is identifiable with one single parameter such as length. It describes an element of the
iers and/or properties.

Evoluzione schema

Nuovo schema dati



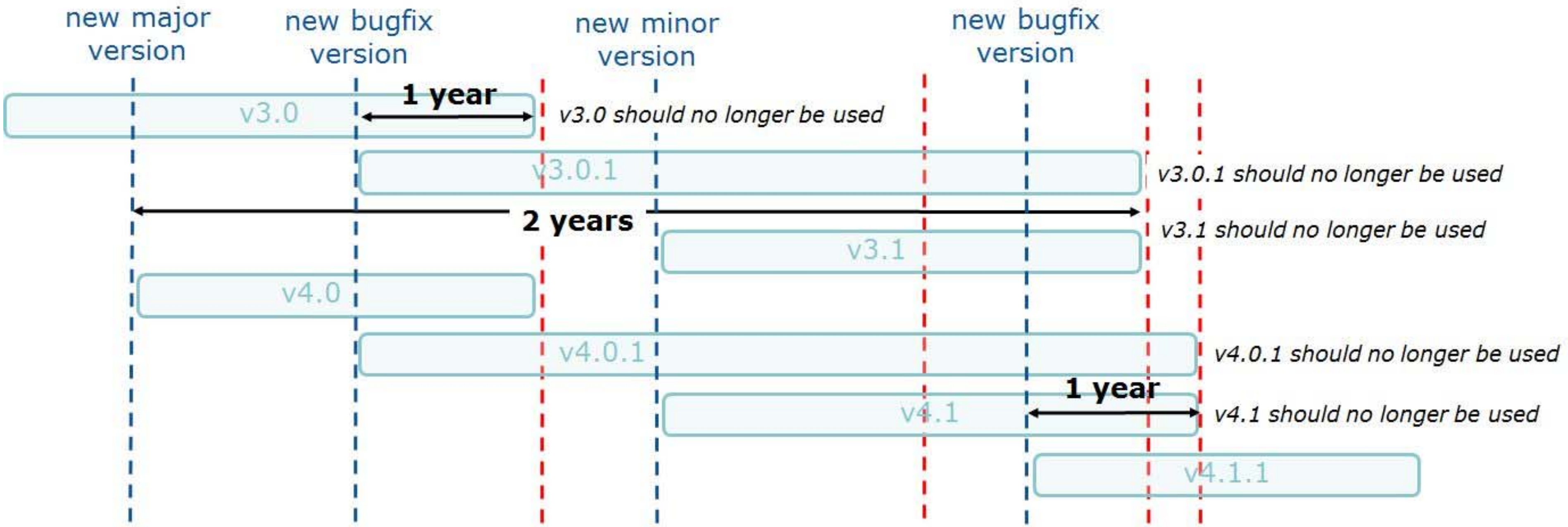
Index of /schemas

Name	Last modifie
Parent Directory	
ac-mf/	2015-04-29 10
act-core/	2015-04-29 10
ad/	2015-04-29 10
af/	2015-04-29 10
am/	2015-04-29 10
au/	2015-04-29 10

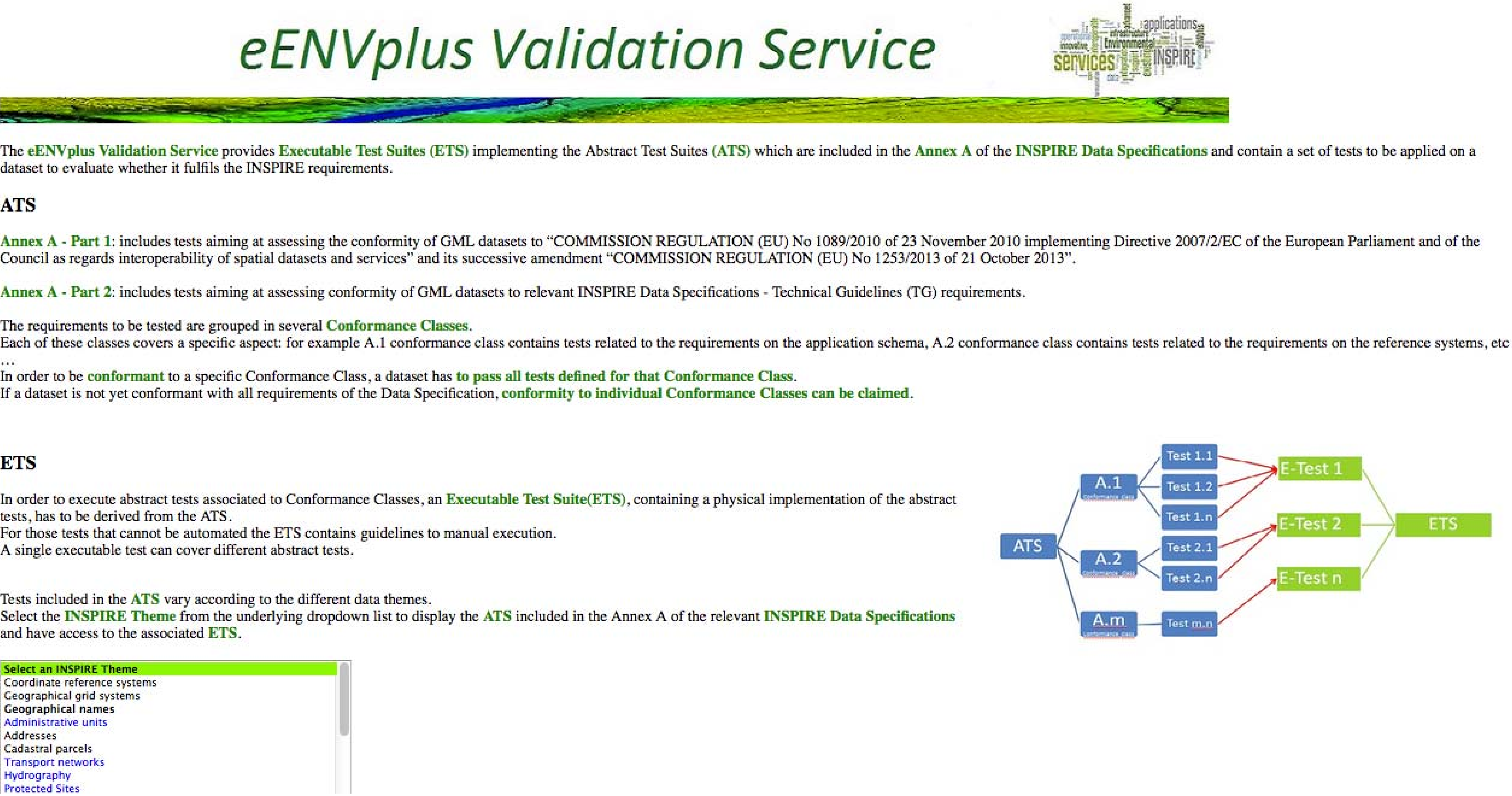
Index of /schemas/au

Name	Last modified	Size	Description
Parent Directory		-	
3.0/	2015-04-29 10:03	-	
4.0/	2015-04-29 10:03	-	
au-3_0_0.zip	2012-12-14 16:37	3.7K	

```
"http://inspire.ec.europa.eu/schemas/tn/4.0" version="4.0">
a.eu/schemas/base/3.3/BaseTypes.xsd"/>
eu/schemas/gn/4.0/GeographicalNames.xsd"/>
.eu/schemas/net/4.0/Network.xsd"/>
19139/20070417/gmd/gmd.xsd"/>
2.1/gml.xsd"/>
' version="3.0.1">
```


new major version
new bugfix version
new minor version
new bugfix version
v3.0
1 year
v3.0 should no longer be used
v3.0.1
v3.0.1 should no longer be used
2 years
v3.1
v3.1 should no longer be used
v4.0
v4.0.1
v4.0.1 should no longer be used
1 year
v4.1
v4.1 should no longer be used
v4.1.1

Validazione



eENVplus Validation Service

The **eENVplus Validation Service** provides **Executable Test Suites (ETS)** implementing the Abstract Test Suites **(ATS)** which are included in the **Annex A** of the **INSPIRE Data Specifications** and contain a set of tests to be applied on a dataset to evaluate whether it fulfils the INSPIRE requirements.

ATS

Annex A - Part 1: includes tests aiming at assessing the conformity of GML datasets to "COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial datasets and services" and its successive amendment "COMMISSION REGULATION (EU) No 1253/2013 of 21 October 2013".

Annex A - Part 2: includes tests aiming at assessing conformity of GML datasets to relevant INSPIRE Data Specifications - Technical Guidelines (TG) requirements.

The requirements to be tested are grouped in several **Conformance Classes**.
Each of these classes covers a specific aspect: for example A.1 conformance class contains tests related to the requirements on the application schema, A.2 conformance class contains tests related to the requirements on the reference systems, etc …
In order to be **conformant** to a specific Conformance Class, a dataset has **to pass all tests defined for that Conformance Class**.
If a dataset is not yet conformant with all requirements of the Data Specification, **conformity to individual Conformance Classes can be claimed**.

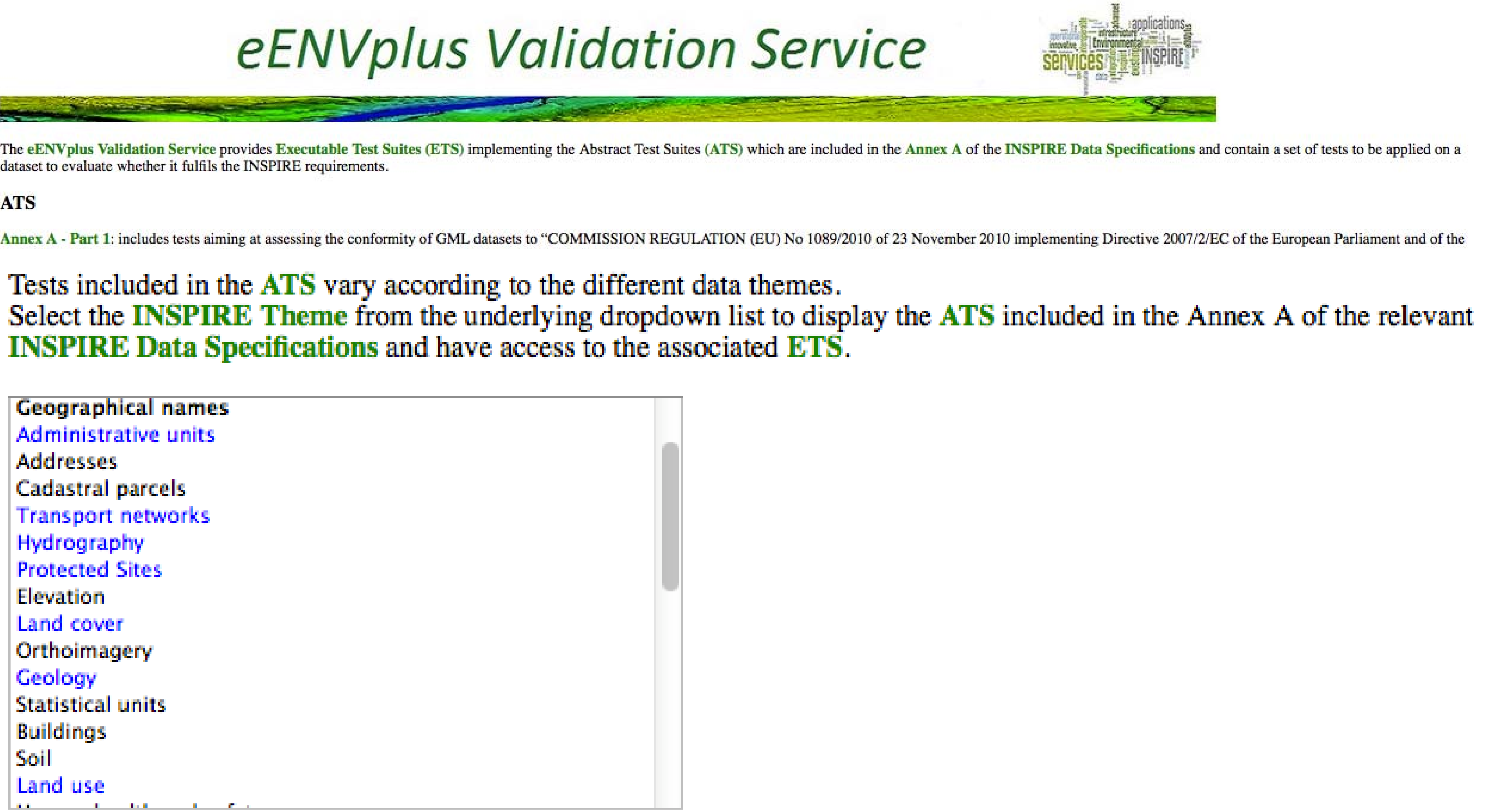
ETS

In order to execute abstract tests associated to Conformance Classes, an **Executable Test Suite(ETS)**, containing a physical implementation of the abstract tests, has to be derived from the ATS.
For those tests that cannot be automated the ETS contains guidelines to manual execution.
A single executable test can cover different abstract tests.

Tests included in the **ATS** vary according to the different data themes.
Select the **INSPIRE Theme** from the underlying dropdown list to display the **ATS** included in the Annex A of the relevant **INSPIRE Data Specifications** and have access to the associated **ETS**.

Select an INSPIRE Theme
Coordinate reference systems
Geographical grid systems
Geographical names
Administrative units
Addresses
Cadastral parcels
Transport networks
Hydrography
Protected Sites

Validazione



eENVplus Validation Service

The **eENVplus Validation Service** provides **Executable Test Suites (ETS)** implementing the Abstract Test Suites **(ATS)** which are included in the **Annex A** of the **INSPIRE Data Specifications** and contain a set of tests to be applied on a dataset to evaluate whether it fulfils the INSPIRE requirements.

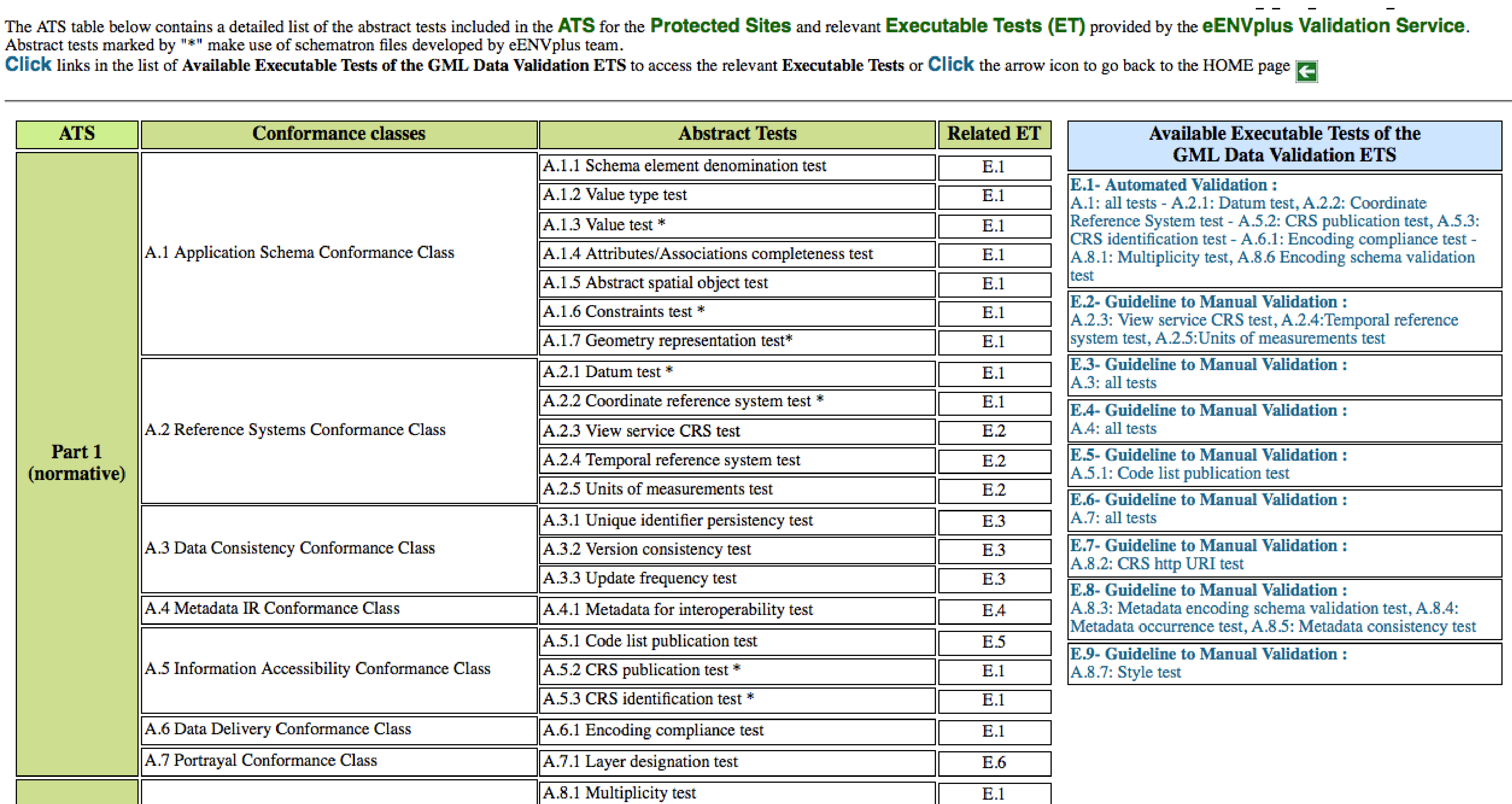
ATS

Annex A - Part 1: includes tests aiming at assessing the conformity of GML datasets to "COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the

Tests included in the **ATS** vary according to the different data themes.
Select the **INSPIRE Theme** from the underlying dropdown list to display the **ATS** included in the Annex A of the relevant **INSPIRE Data Specifications** and have access to the associated **ETS**.

- Geographical names
- Administrative units
- Addresses
- Cadastral parcels
- Transport networks
- Hydrography
- Protected Sites
- Elevation
- Land cover
- Orthoimagery
- Geology
- Statistical units
- Buildings
- Soil
- Land use

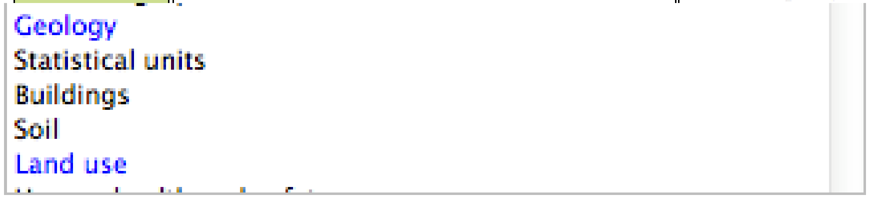
Validazione



The ATS table below contains a detailed list of the abstract tests included in the **ATS** for the **Protected Sites** and relevant **Executable Tests (ET)** provided by the **eENVplus Validation Service**.
Abstract tests marked by "*" make use of schematron files developed by eENVplus team.
Click links in the list of **Available Executable Tests of the GML Data Validation ETS** to access the relevant **Executable Tests** or **Click** the arrow icon to go back to the HOME page

ATS	Conformance classes	Abstract Tests	Related ET
Part 1 (normative)	A.1 Application Schema Conformance Class	A.1.1 Schema element denomination test	E.1
		A.1.2 Value type test	E.1
		A.1.3 Value test *	E.1
		A.1.4 Attributes/Associations completeness test	E.1
		A.1.5 Abstract spatial object test	E.1
		A.1.6 Constraints test *	E.1
		A.1.7 Geometry representation test*	E.1
	A.2 Reference Systems Conformance Class	A.2.1 Datum test *	E.1
		A.2.2 Coordinate reference system test *	E.1
		A.2.3 View service CRS test	E.2
		A.2.4 Temporal reference system test	E.2
		A.2.5 Units of measurements test	E.2
	A.3 Data Consistency Conformance Class	A.3.1 Unique identifier persistency test	E.3
		A.3.2 Version consistency test	E.3
		A.3.3 Update frequency test	E.3
	A.4 Metadata IR Conformance Class	A.4.1 Metadata for interoperability test	E.4
	A.5 Information Accessibility Conformance Class	A.5.1 Code list publication test	E.5
		A.5.2 CRS publication test *	E.1
		A.5.3 CRS identification test *	E.1
	A.6 Data Delivery Conformance Class	A.6.1 Encoding compliance test	E.1
	A.7 Portrayal Conformance Class	A.7.1 Layer designation test	E.6
		A.8.1 Multiplicity test	E.1

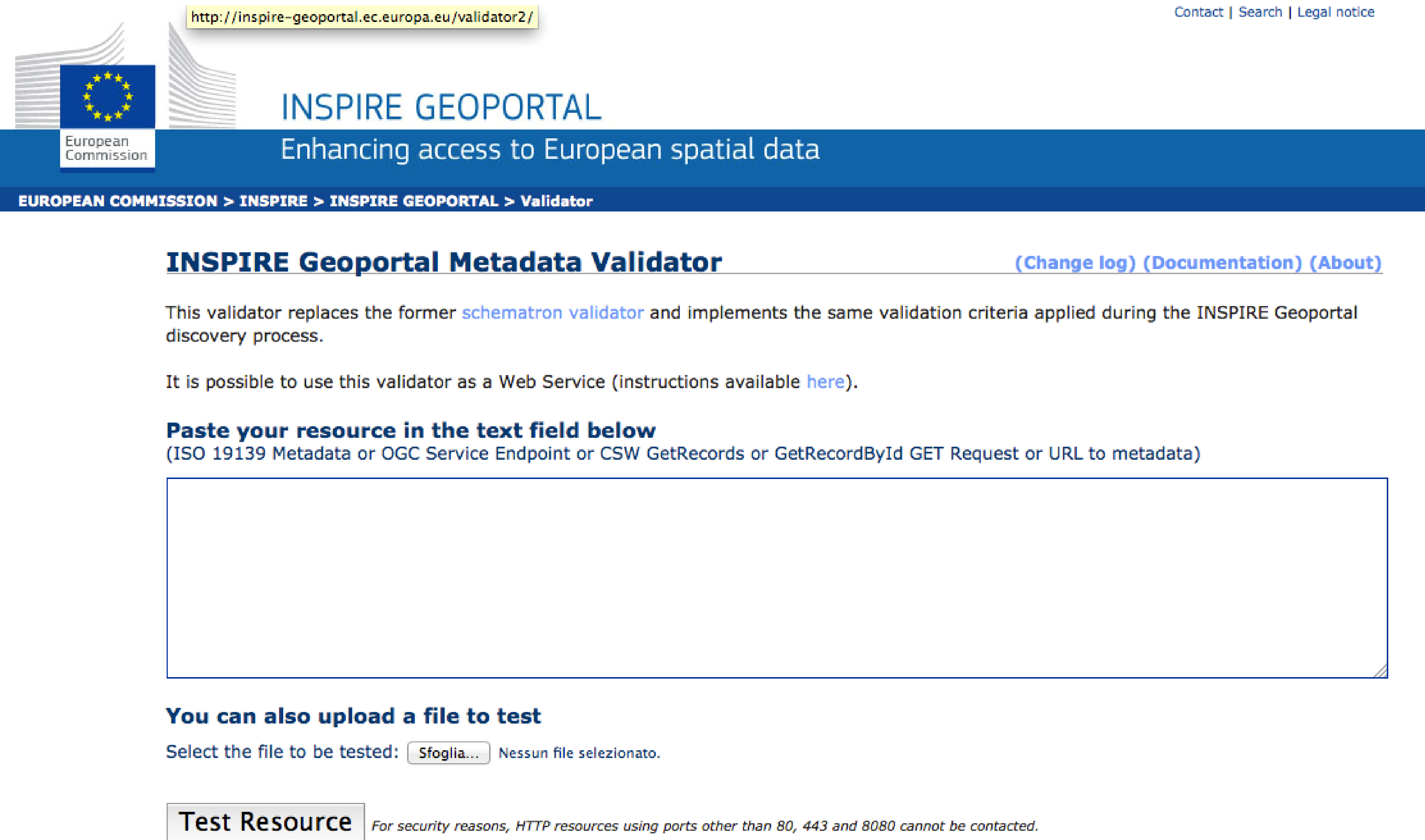
Available Executable Tests of the GML Data Validation ETS
E.1- Automated Validation : A.1: all tests - A.2.1: Datum test, A.2.2: Coordinate Reference System test - A.5.2: CRS publication test, A.5.3: CRS identification test - A.6.1: Encoding compliance test - A.8.1: Multiplicity test, A.8.6 Encoding schema validation test
E.2- Guideline to Manual Validation : A.2.3: View service CRS test, A.2.4:Temporal reference system test, A.2.5:Units of measurements test
E.3- Guideline to Manual Validation : A.3: all tests
E.4- Guideline to Manual Validation : A.4: all tests
E.5- Guideline to Manual Validation : A.5.1: Code list publication test
E.6- Guideline to Manual Validation : A.7: all tests
E.7- Guideline to Manual Validation : A.8.2: CRS http URI test
E.8- Guideline to Manual Validation : A.8.3: Metadata encoding schema validation test, A.8.4: Metadata occurrence test, A.8.5: Metadata consistency test
E.9- Guideline to Manual Validation : A.8.7: Style test



Geology
Statistical units
Buildings
Soil
Land use

Validazione

Validazione



http://inspire-geoportal.ec.europa.eu/validator2/

Contact | Search | Legal notice
European Commission
INSPIRE GEOPORTAL
Enhancing access to European spatial data
EUROPEAN COMMISSION > INSPIRE > INSPIRE GEOPORTAL > Validator

INSPIRE Geoportal Metadata Validator

(Change log) (Documentation) (About)

This validator replaces the former schematron validator and implements the same validation criteria applied during the INSPIRE Geoportal discovery process.

It is possible to use this validator as a Web Service (instructions available here).

Paste your resource in the text field below
(ISO 19139 Metadata or OGC Service Endpoint or CSW GetRecords or GetRecordById GET Request or URL to metadata)

You can also upload a file to test

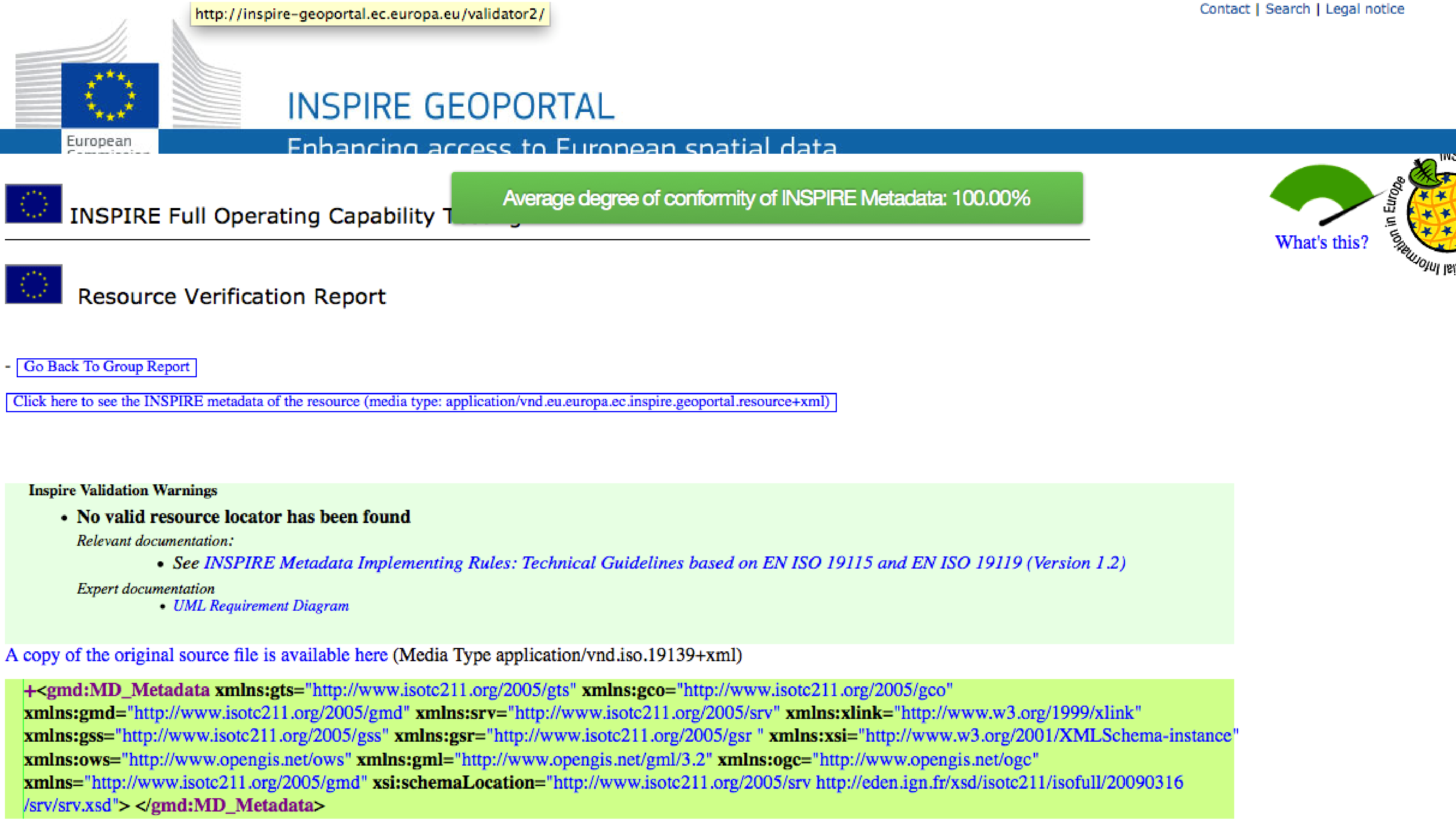
Select the file to be tested: Sfoglia... Nessun file selezionato.

Test Resource

For security reasons, HTTP resources using ports other than 80, 443 and 8080 cannot be contacted.

Validazione

Validazione



http://inspire-geoportal.ec.europa.eu/validator2/

Contact | Search | Legal notice

INSPIRE GEOPORTAL

Enhancing access to European spatial data

INSPIRE Full Operating Capability T

Average degree of conformity of INSPIRE Metadata: 100.00%

What's this?

Resource Verification Report

- Go Back To Group Report

Click here to see the INSPIRE metadata of the resource (media type: application/vnd.eu.europa.ec.inspire.geoportal.resource+xml)

Inspire Validation Warnings

- **No valid resource locator has been found**

  Relevant documentation:
  - *See INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119 (Version 1.2)*

  Expert documentation
  - *UML Requirement Diagram*

A copy of the original source file is available here (Media Type application/vnd.iso.19139+xml)

```
+<gmd:MD_Metadata xmlns:gts="http://www.isotc211.org/2005/gts" xmlns:gco="http://www.isotc211.org/2005/gco"
xmlns:gmd="http://www.isotc211.org/2005/gmd" xmlns:srv="http://www.isotc211.org/2005/srv" xmlns:xlink="http://www.w3.org/1999/xlink"
xmlns:gss="http://www.isotc211.org/2005/gss" xmlns:gsr="http://www.isotc211.org/2005/gsr " xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:ows="http://www.opengis.net/ows" xmlns:gml="http://www.opengis.net/gml/3.2" xmlns:ogc="http://www.opengis.net/ogc"
xmlns="http://www.isotc211.org/2005/gmd" xsi:schemaLocation="http://www.isotc211.org/2005/srv http://eden.ign.fr/xsd/isotc211/isofull/20090316
/srv/srv.xsd"> </gmd:MD_Metadata>
```

Temi implementativi

Spatial Data Services

Web Coverage/ Tables

Validazione/conformità

Grazie per l’attenzione …

?? Domande??

Riferimenti:

carlo.cipolloni@isprambiente.it