



Državna geodetska uprava



INSPIRE Validation & Conformity testing

Izv. prof. dr. sc. Vlado Cetl & Dr. sc. Tomáš Kliment



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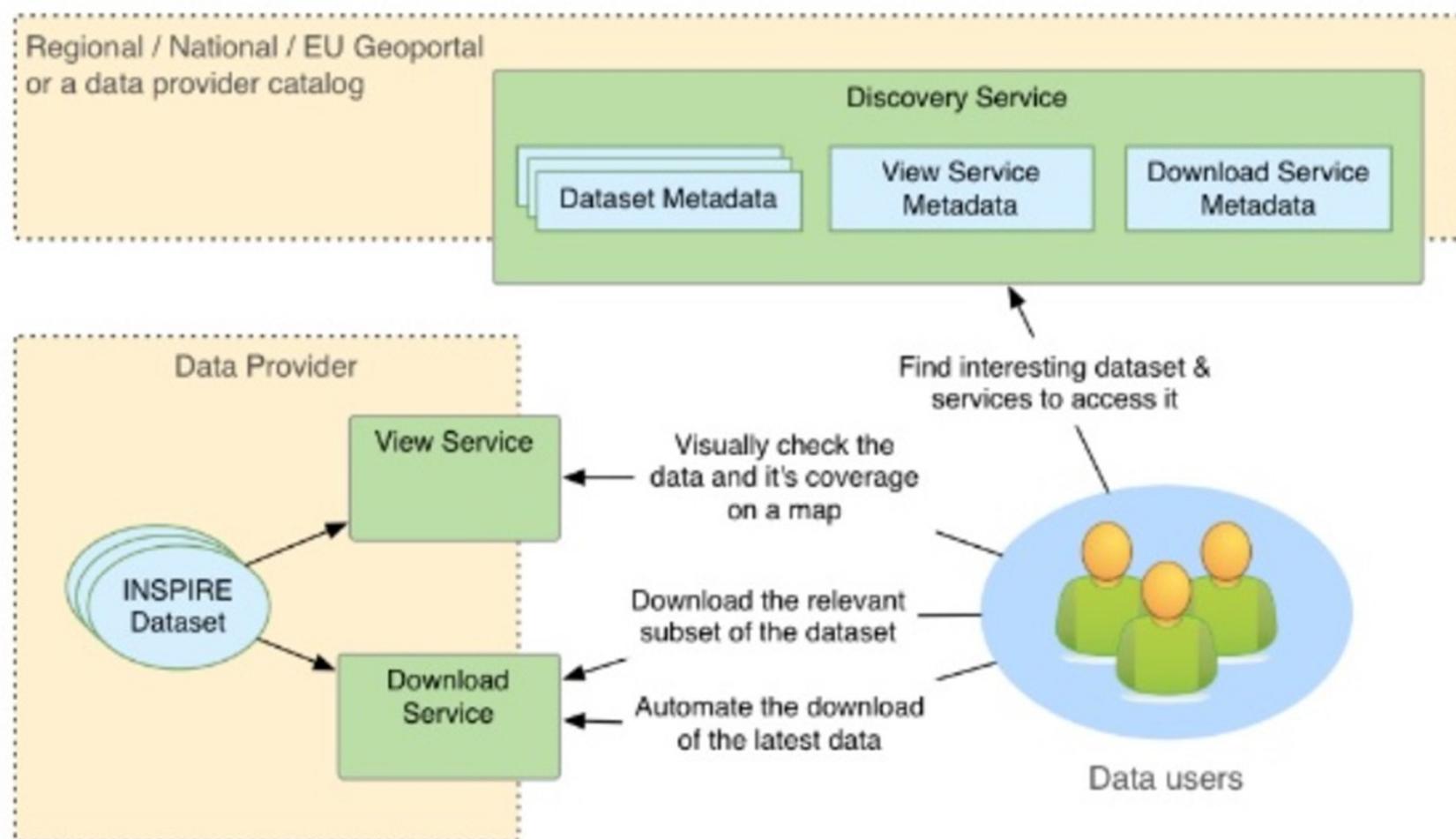
INSPIRE Conformity Label?



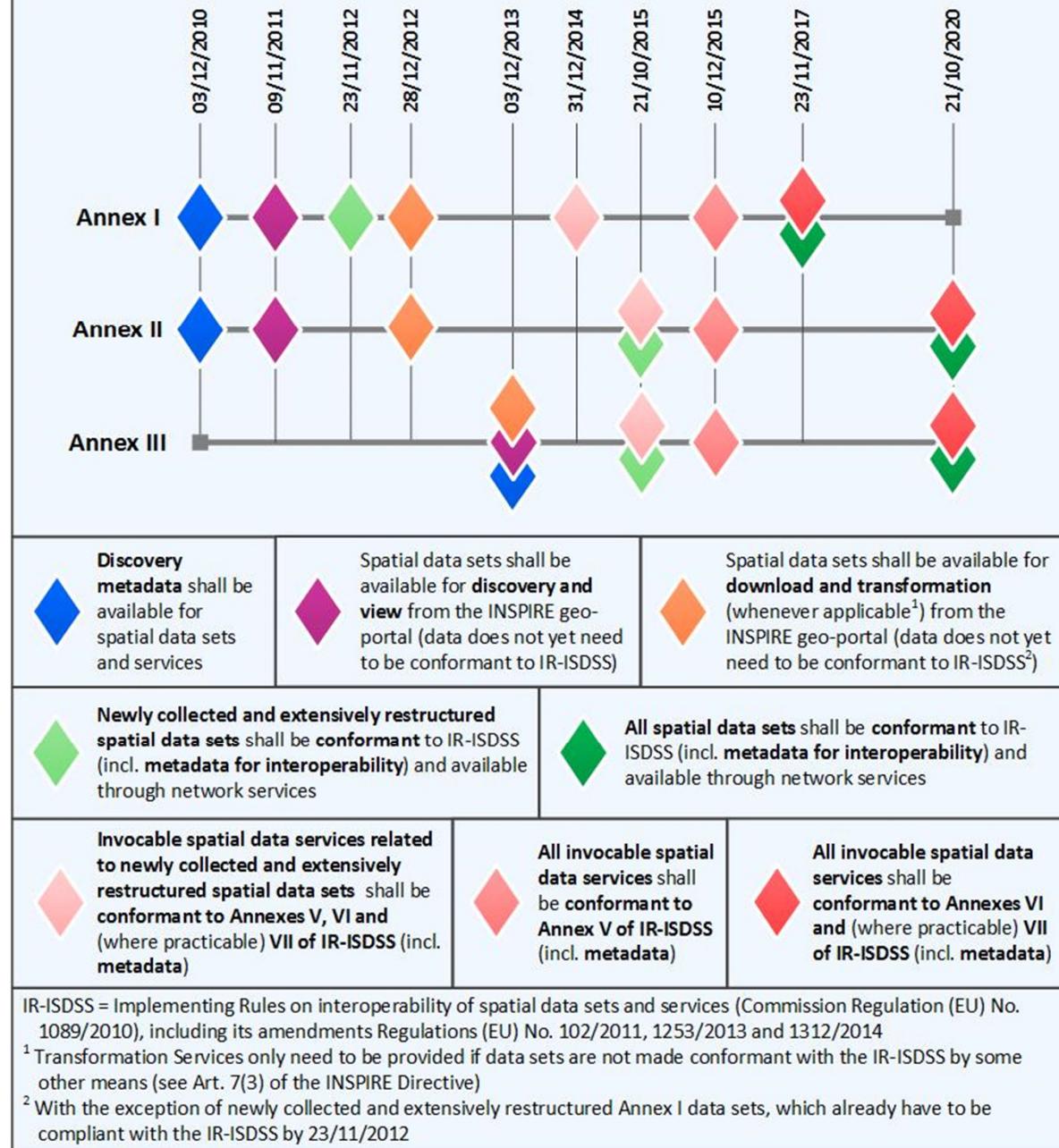
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INSPIRE i NIPP u praksi



INSPIRE Implementation Roadmap

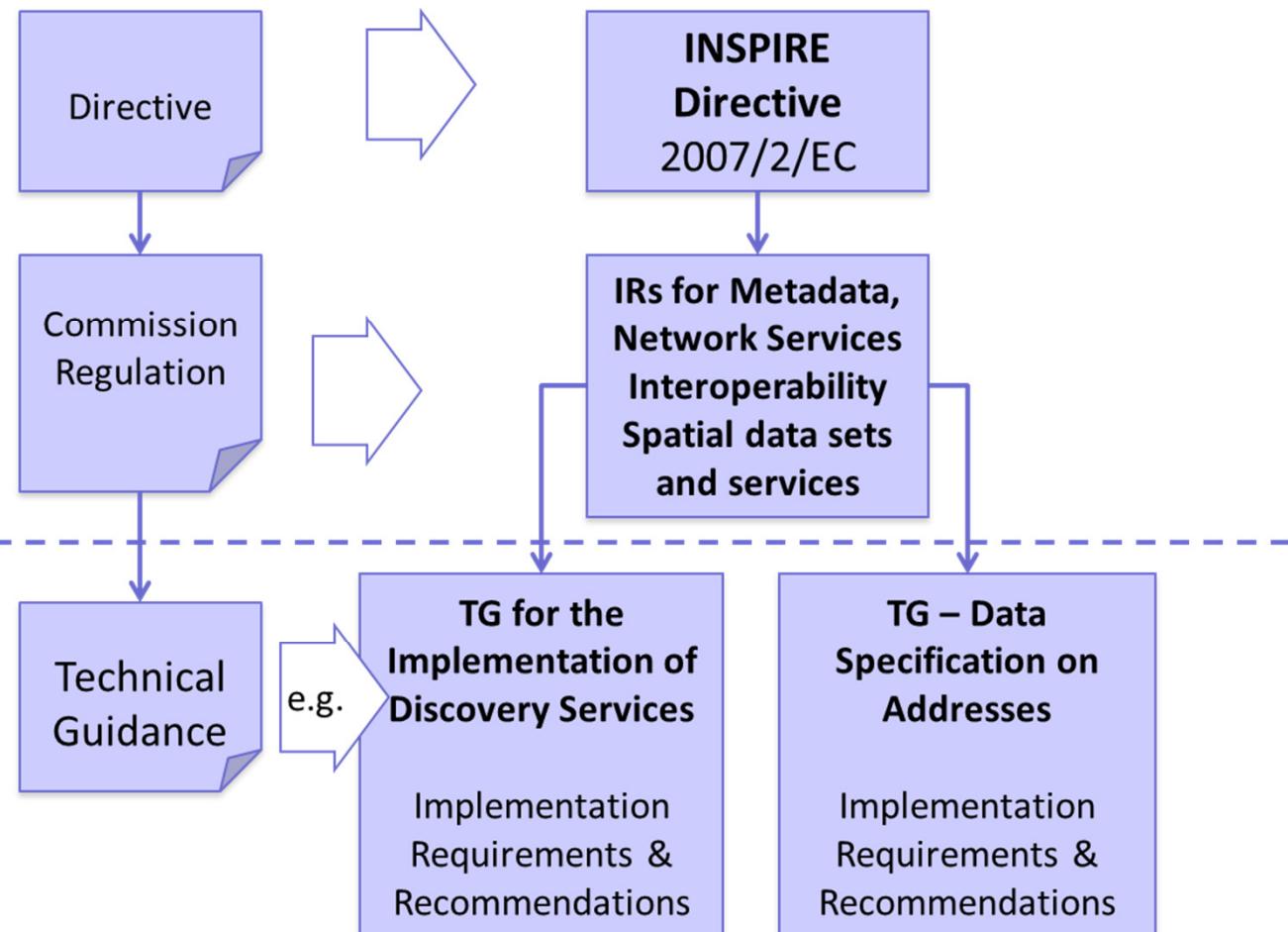


INSPIRE IR vs. TGs

“What Member States
must implement”
(abstract
specification)

legally binding
not legally binding

“How Member States
might implement it”
(implementation
specification)



INSPIRE Conformity?

1. Legal point of view: conform to Directive & IR
2. Practical point of view: conform to the requirements stated in TG documents

Automatic testing tools for INSPIRE implementations
only feasible partly for some detailed technical
requirements (aim to help data providers) e.g.
schematron, OGC validator

<http://cite.opengeospatial.org/teamengine/>

ATS vs. ETS



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Abstract Test Suite (ATS)

Annex A (normative)

Abstract Test Suite

Disclaimer

While this Annex refers to the 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 data sets and services, it does not replace the legal act or any part of it.

The objective of the Abstract Test Suite (ATS) included in this Annex is to help the conformance testing process. It includes a set of tests to be applied on a data set to evaluate whether it fulfils the requirements included in this data specification and the corresponding parts of Commission Regulation No 1089/2010 (implementing rule as regards interoperability of spatial datasets and services, further referred to as ISDSS Regulation). This is to help data providers in declaring the conformity of a data set to the “degree of conformity, with implementing rules adopted under Article 7(1) of Directive 2007/2/EC”, which is required to be provided in the data set metadata according to Commission Regulation (EC) No 2008/1205 (the Metadata Regulation).

Part 1 of this ATS includes tests that provide **input for assessing conformity with the ISDSS regulation**. In order to make visible which requirements are addressed by a specific test, references to the corresponding articles of the legal act are given. The way how the cited requirements apply to **an specification** is described under the testing method



ATS



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MIWP-5: Validation & conformity

INSPIRE > MIG Početna stranica

MIG-T » MIWP-5: Validation & conformity

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Pregled

This sub-project addresses action MIWP-5 (Validation and conformity testing) of the Maintenance and Implementation Work Programme:

As INSPIRE is coming into a practical implementation phase there is a great need of tools for validation (metadata, service and data). There is a validation service (Webservice) available at the EU-portal and some countries have also developed tools for validation of metadata and services, for instance in the Netherlands and Germany. These validators might include slightly different interpretations of standards. To ensure that result from a tests of conformity are identical, a common, officially approved, validator should be accessible from INSPIRE web.

Software vendors claim that their products are INSPIRE-compliant without having undergone a certification process.

The abstract test suites in Inspire data specifications define the set of tests to be applied but there is no reference implementation of those abstract test suites.

Praćenje predmeta

- Task: 26 open / 33
- Discussion: 1 open / 1
- Publication: 0 open / 0
- Meeting: 0 open / 1
- Conference: 0 open / 0
- Call for participation: 0 open / 0

[Pregled svih predmeta](#) | [Kalendar](#)

Članovi

Manager: Carlo Cipolloni, Chris Schubert, Daniela Hogrebe, Ilkka Rinne, Michael Lutz
Developer: Alberto Belussi, Alejandra Sanchez, Angelo Quaglia, Antonio Rotundo, Carlo Cipolloni, Chris Schubert, Christian Ansorge, Daniel Cocanu, Daniela Hogrebe, Darja Lihenteiger, Etienne Taffoureau, Fabio Vinci, Francisco J Lopez-Pellicer, Francois Prunayre, Freddy Fierens, Giacomo Martirano, Ilkka Rinne, Iurie Maxim, Luis Bermudez, Marc Leobet, Marcin Grudzien, Marcus Sen, Markus Seifert, Michael Lutz, Michael Schulz, Michael Ostling, Paul Hasenohr, Paul van Genuchten, Paweł Soczewski, Peter Deák, Peter Parslow, Radoslav Chudy, Robert Tomas, Robin S. Smith, Sven Böhme, Thijss Brentjens, Tim Duffy, Vanda Nunes de Lima, Wolfgang Tinkl
Reporter: Alain Buogo, Alberto Belussi, Alex Ramage, Alexander Kotsev, Andrea Perego, Angelo Quaglia, Anna Ahlbrecht, Arvid Lillethun, Arvids Ozols, Benoit David, Carlo Cipolloni, Christian Ansorge, Christina Wasström, Christine Najar, Daniela Hogrebe, Daniele Francioli, Darja Lihenteiger, Elena Grigoriou, Emilio López Romero, Evgenia Grigoriou, Ewa Surma, Fabio Vinci, Freddy Fierens, Giacomo Martirano, Hannes Reuter, Heidi Vanparnis, Henrique Silva, Hugo de Groot, Ilkka Rinne, Iurie Maxim, Jari Reini, Jiri Polacek, Joeri Robbrecht, Karen Fullerton, Kjell Hjorth, Lars Storgaard, Lilyana Turnaliev-Tsolova, Lorena Hernandez Quiros, Luis Bermudez, Marc Leobet, Marcin Grudzien, Markus Jobst, Markus Seifert, Martin Tuchyna, María Soledad Gómez, Michael Lutz, Michel Grothe, Michel Millot, Michele Munafò, MIG Member, Nathalie Delattre, Paul Hasenohr, Paul Smits, Paweł Soczewski, Radoslav Chudy, Robert Tomas, Roberto Sgnaolin, Robin S. Smith, Stefan Jensen, Sulev Öistpuu, Tamás Palya, Tim Duffy, Tomislav Ciceli, Vanda Nunes de Lima, Wolfgang Fahrner, Zhenya Valcheva

Novosti

Controlling notification emails from Redmine (2 comments)
If you feel you are getting too many notification emails, please adjust your settings

<https://ies-svn.jrc.ec.europa.eu/projects/validation-and-conformity-testing>



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Some existing conformity tools

- <https://ies-svn.jrc.ec.europa.eu/projects/validation-and-conformity-testing/wiki/Overview about existing validation toolsolutions>



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Some existing conformity tools

Existing Tool / Solution	Contact Point	Status	License	Source	Multilingual	Test Engine	Test Language	API	Metadata validation	Checklist per domain			
										Discovery Service validation	View Service validation	Download Service validation	Data specification validation
GDI-DE Testsuite	support(at)gdi-de.org	Operational	Mozilla Public License 1.1		X (de, en)	TEAM Engine	CTL, (TestNG)	X	X	X	X (based on WMS 1.1.1 and WMS 1.3.0)	X (Atom Feed)	
INSPIRE Geoportal validator	inspire-geoportal(at)jrc.ec.europa.eu	Operational	European Public License		English (Czech and Slovak under development)		XSLT, Java	X	X	X (Capabilities)	X (Capabilities)	X (Capabilities)	
Géocatalogue - metadata validation service		Operational					Schematron		X				
Polish metadata validation service		Operational					C#		X				
Spanish NSDI (IDEE) Metadata and Services Validator (prototype)	fjlopez@unizar.es	Prototype			X (es, en)	Test execution tool: Cucumber (JVM version) + Web frontend	ATS: Specs written in Gherkin in Spanish and English ETS: ATS + adaptor code written in Java	Planned		X	X (based on WMS 1.3.0)		
Spanish NSDI (IDEE) Metadata Validator (operational)	idee(at)fomento.es	Operational			X (es, en)		Schematron		X				
ELF test framework (former ESDIN test framework)	t.brentjens(at)geonovum.nl	Under development	BSD license (?)			SoapUI	Java	WIP			X	X	X



Some existing conformity tools

Spatineo Monitor	info@spatineo.com	Operational	Commercial		X (fi, en, fr, de)		Java				X (Capabilities)		
NeoGeo	contact(at)neogeo-online.net	Operational	GPL								X (Capabilities?)		
Geonovum Validation Tools	i.devisser(at)geonovum.nl (Metadata), I.vandenbrink (at)geonovum.nl (Data specifications)	Operational (?)			partly based on SoapUI (see ELF test framework)	Schematron		X (based on dutch profile)			X	X	X
eENVplus Validation Service	g.martirano(at)epsilon-italia.it	Pilot			TEAM Engine	CTL, Schematron							X
WebTest		?				Schematron, XSLT		X					
UK Metadata Validation	<u>IST36Secretariat (at) agi.org.uk</u>	Operational	UK Open Government Licence			Schematron		X					
GeoNetwork	paul.vangenuchten(at)geocat.net, fx.prunayre(at)gmail.com	Operational	GPL		X	Saxon	Schematron	X					
Romanian NSDI metadata validation service	daniel.urda(at)teamnet.ro, daniel.cocanu(at)teamnet.ro	Operational			X(ro, en)		Java		X				
FOSS4G WMS Benchmark	✉ http://lists.osgeo.org/mailman/listinfo/benchmarking	Operational	CC-SA ?	project files		JMeter	JMeter Spec File				X (QoS only)		
Open Web Service benchmark	gregory.giuliani@unige.ch and pierre.lacroix@unige.ch	Research				JMeter	JMeter Spec File				X (QoS only)		



European project eENVplus (Validation Service)

- Executable test suite (ETS) verifies the conformance of GML datasets with respect to INSPIRE application schemas and also with respect to ISO 19136:2007 (GML 3.2.1).
- For the time being the full ETS (including schematron file and guidelines) is available for PS theme
- For those tests that cannot be automated, the ETS contains guidelines to manual execution
- Work is still in progress



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

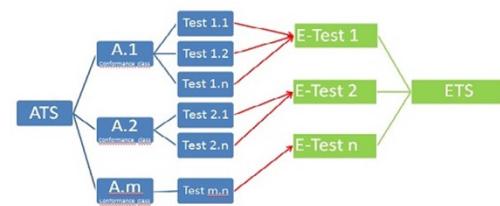
Annex A - Part I: includes tests aiming at assessing the conformity of GML datasets to COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial datasets and services" and its successive 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 **ATM** vary according to the different data themes.
Select the **INSPIRE Theme** from the underlying dropdown list to display the **ATM** 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
- Elevation
- Land cover**
- Orthoimagery
- Geology**
- Statistical units

- http://cloud.epsilon-italia.it/eenvplus_new/



INSPIRE is not ready!

- INSPIRE is still work in progress
- Need for more reliable validation tools for INSPIRE metadata, services and datasets
- Different validators exist but the results differ due to different interpretations of the requirements
- No official INSPIRE conformity testing (EC?)
- INSPIRE MIG MIWP-5 Validation&Conformity testing



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Thank you!

vcetl@geof.hr & tkliment@geof.hr



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