» Validação INSPIRE

Validador INSPIRE aplicado à toponímia

(21 junho de 2017)

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O que é a validação?

- ✓ Os *Abstract Test Suites* (ATS), das especificações de dados do *INSPIRE* definem os conjuntos de testes que devem ser aplicados aos metadados, dados e serviços para avaliar a sua conformidade.

- ✓ A conformidade define o nível em que os metadados, dados e serviços, cumprem a(s) norma(s) correspondente(s) ou especificações.

- ✓ Para estar em total conformidade deve executar e passar todos os ATS definidos nas respectivas especificações

- ✓ Executar os *Executable Test Suites* (ETS) que implementam os ATS especificados pela Diretiva INSPIRE

- ✓ Não existe referência na documentação oficial quanto à forma como os ATS devem ser implementados

Algumas ferramentas existentes

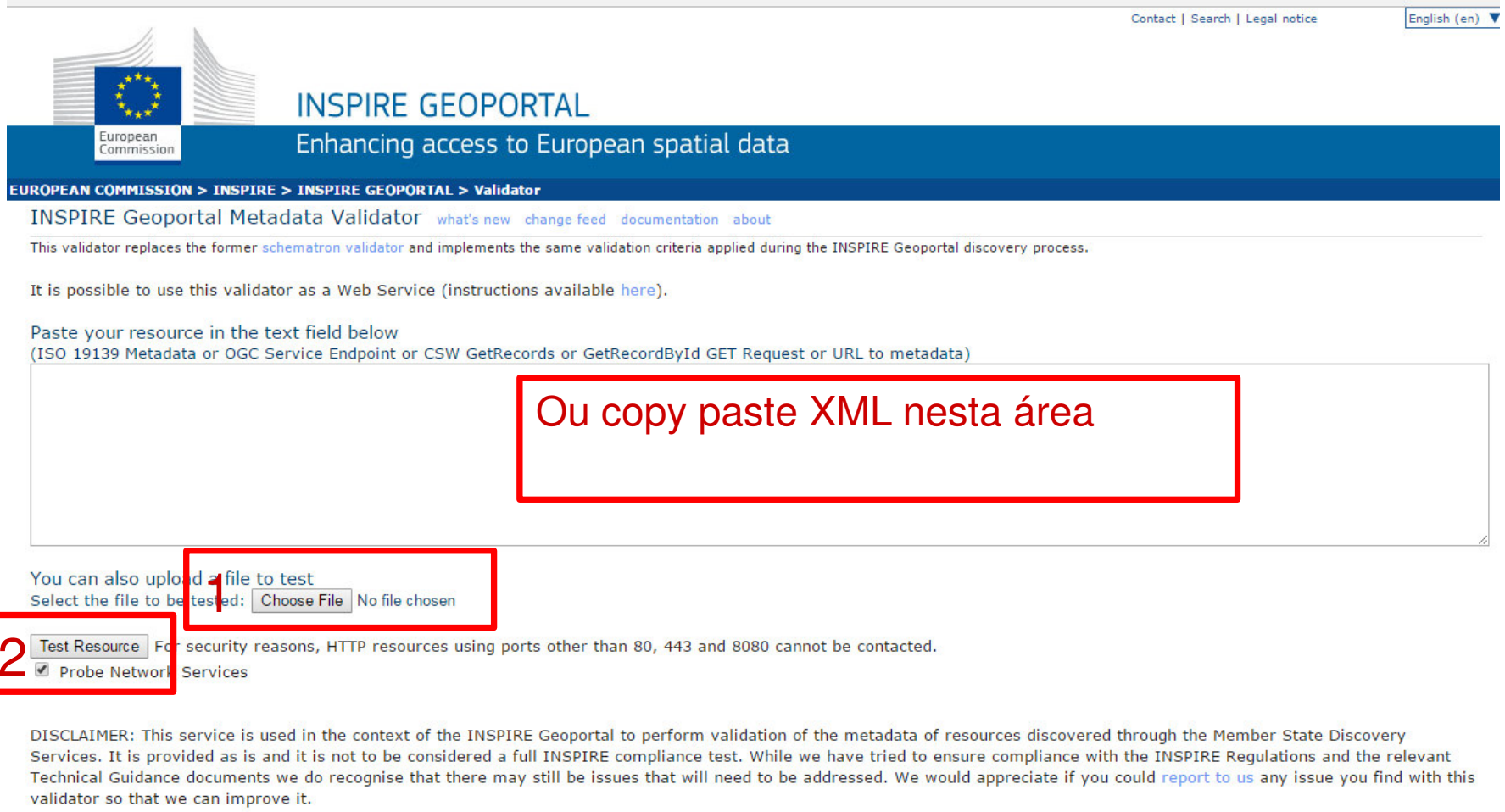
- ✓ **Metadados**
  - ✓ **INSPIRE Geoportal Metadata Validador**
  - ✓ **INSPIRE Validator (development version)**
- ✓ **Serviços**
  - ✓ **WMS Inspire Tester**
  - ✓ **INSPIRE Validator (development version)**
- ✓ **Dados - Harmonização (GML)**
  - ✓ **Hale Studio**
  - ✓ **eENVplus (pouco funcional e "parece estar em desuso")**
  - ✓ **INSPIRE Validator (development version)**

INSPIRE Geoportal Metadata Validador

- ✓ **INSPIRE Geoportal Metadata Validador**
- ✓ **Validador online de metadados criado pela CE**
  - ✓ **http://inspire-geoportal.ec.europa.eu/validator2/**
- ✓ **Objectivo: Testar conformidade de metadados de conjuntos e serviços de dados, de acordo com o Metadata Technical Guidance**
- ✓ **Interface bastante simples, segue as orientações da directiva INSPIRE, bastante utilizado por utilizadores Portugueses**

INSPIRE Geoportal Metadata Validador

✓ Como utilizar?



INSPIRE Geoportal Metadata Validador

- ✓ **Resultados:**
- ✓ **Se forem detetados problemas é fornecida uma lista de elementos inválidos e informação do grau de conformidades dos metadados**
- ✓ **Se não forem detetados problemas, o browser é redirecionado para uma página com a representação dos metadados**
- ✓ **Possível de usar como WebService**

Tipos de entrada:

1. **Metadados codificados com norma ISO 19139**
2. **Serviços de pesquisa: OGC CSW 2.0.2 AP ISO 1.0.1 with INSPIRE Extensions**
3. **Serviços de visualização: ISO 19128 (OGC WMS 1.3.0), OGC WMS 1.1.1, OGC WMTS 1.0.0 with INSPIRE Extensions**
4. **Serviços de descarregamento: ATOM, ISO 19142 (OGC WFS 2.0.0) with INSPIRE Extensions**

INSPIRE Geoportal Metadata Validador

INSPIRE Full Operating Capability [illegible]

Average degree of conformity of INSPIRE Metadata: 82.35%

What's this?

A conformidade deve ser superior a 75%

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 Issues

- **A keyword defining the INSPIRE Spatial Data Theme is required for Spatial Data Sets and Series but it could not be found**

  Relevant documentation:
  - *See* TG Requirement 14 *in INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119 (Version 1.3)*
  - *See* If a resource is a spatial data set or spatial data set series *in 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*

  Expert documentation
  - *UML Requirement Diagram*

- **Information on the degree of conformity with the implementing rules on interoperability of spatial data sets and services is required**

  Relevant documentation:
  - *See* TG Requirement 28 *in INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119 (Version 1.3)*
  - *See* Metadata for spatial data sets and spatial data set series *in 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*

  Expert documentation
  - *UML Requirement Diagram*

- **The metadata element "Limitations On Public Access" is missing, empty or incomplete but it is required. Hint: ""**

  Relevant documentation:
  - *See INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119 (Version 1.3)*
  - *See 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*

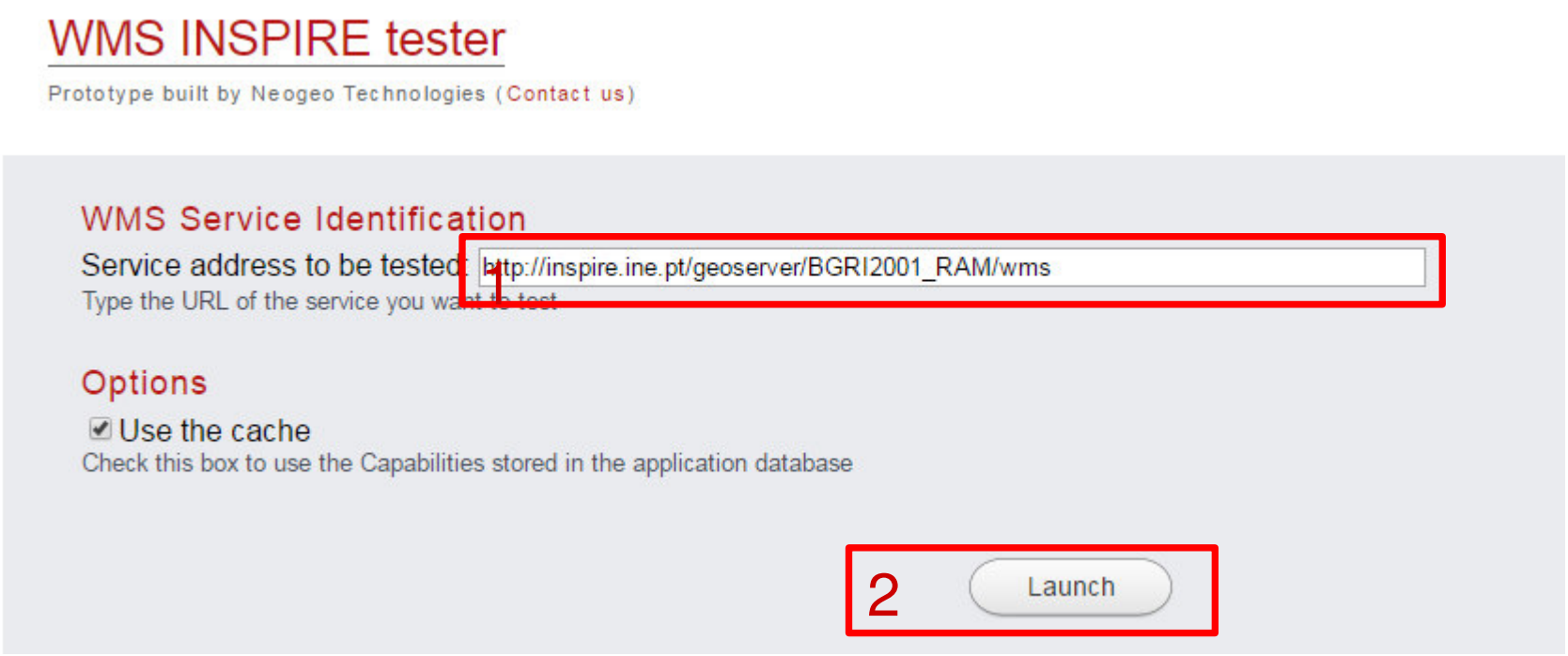
  Expert documentation
  - *UML Requirement Diagram*

WMS INSPIRE Tester

- ✓ **WMS INSPIRE Tester**
- ✓ **O *WMS INSPIRE Tester* é um validador que executa um conjunto de testes Online de serviços de visualização (*WMS* 1.3.0)**
- ✓ **http://inspire-tester.neogeo-online.net/**
- ✓ **Verifica se a resposta de um pedido WMS *GetCapabilities* é compatível com as *Technical guidelines* dos serviços de visualização INSPIRE**
- ✓ **Não é um validador oficial**

WMS INSPIRE Tester

✓ **Como funciona?**

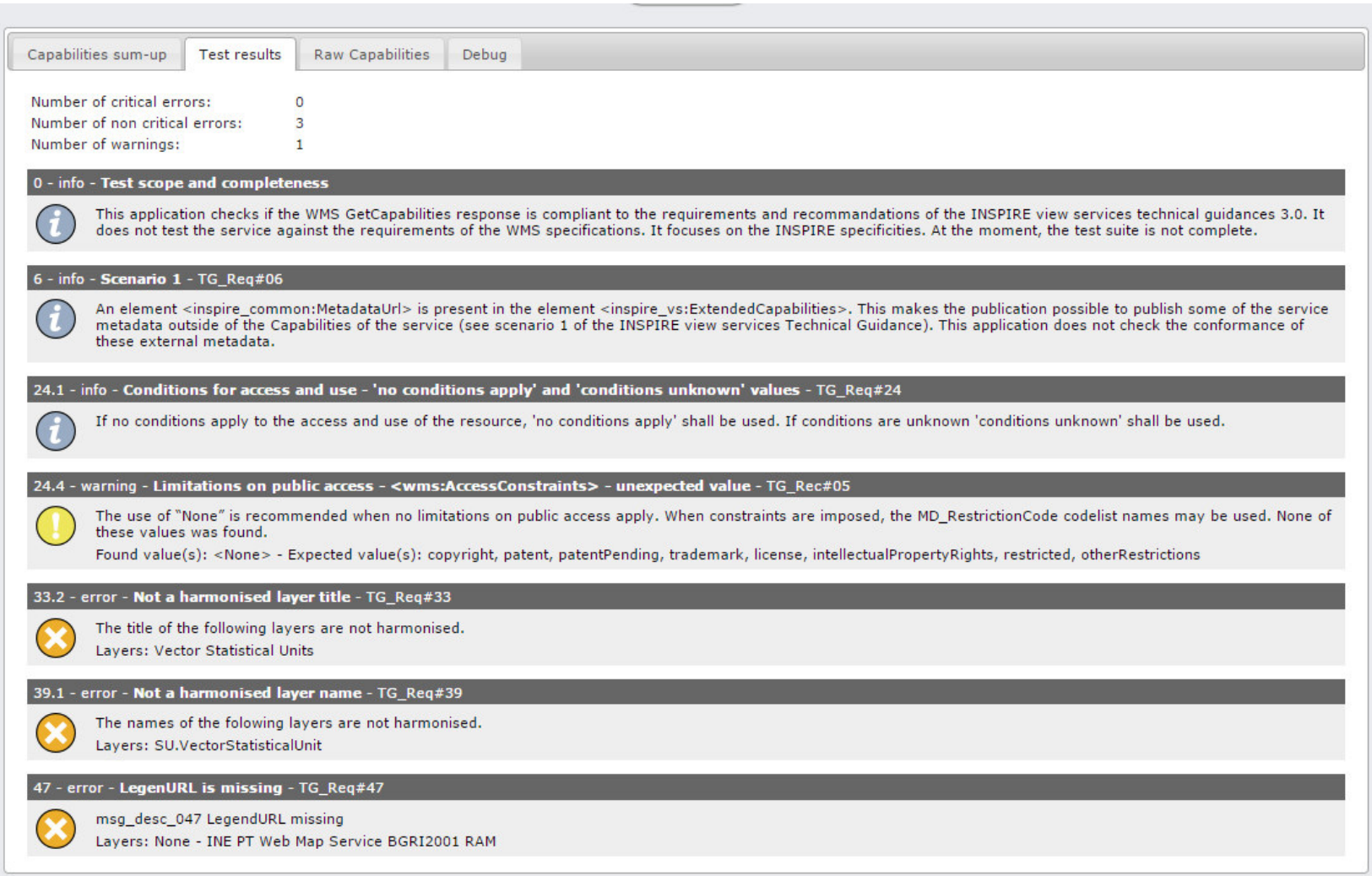


WMS INSPIRE Tester

- ✓ **O processo de criação de Serviços obedece a um conjunto de numerosas regras que o *WMS INSPIRE Tester* vai verificar.**

- ✓ **Na lista de resultados são indicados os seguintes erros:**
  - ✓ **Número de erros críticos**
  - ✓ **Número de erros não críticos**
  - ✓ **Número de avisos**
  - ✓ **Requisito de implementação com problemas**

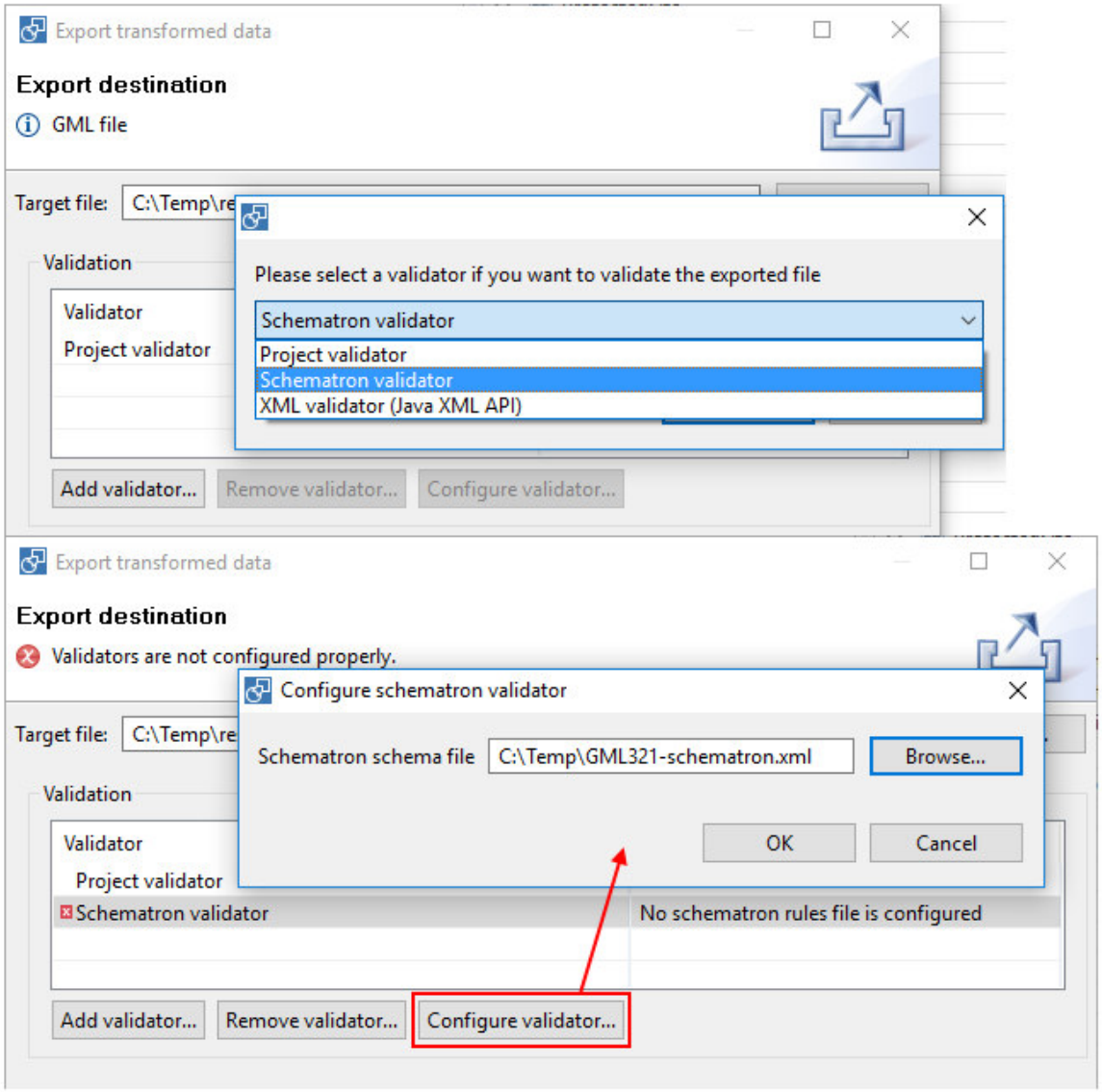
WMS INSPIRE Tester



Dados – Harmonização - Hale Studio

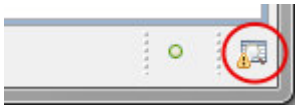
- ✓ **Humboldt Aligment Editor**
- ✓ **Software *Open Source* utilizado para criar relações (mapeamento) entre *schemas* diferentes e aplicar a transformação resultante**
- ✓ **A validação é suportada em *schemas* baseados em XML**
- ✓ **Esta validação pode ser realizada ao exportar o resultado da transformação ou em instâncias carregadas no projeto Hale Studio**
- ✓ **Além desta validação, também é possível ao exportar o resultado validar com o *Schematron*.**
- ✓ **Atenção: O Hale não disponibiliza os *Schematrons***
- ✓ **É produzido um relatório sobre os erros encontrados e o utilizador é informado se o ficheiro criado é válido ou inválido**

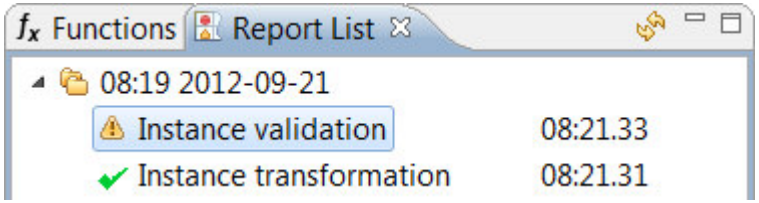
Dados – Harmonização - Hale Studio



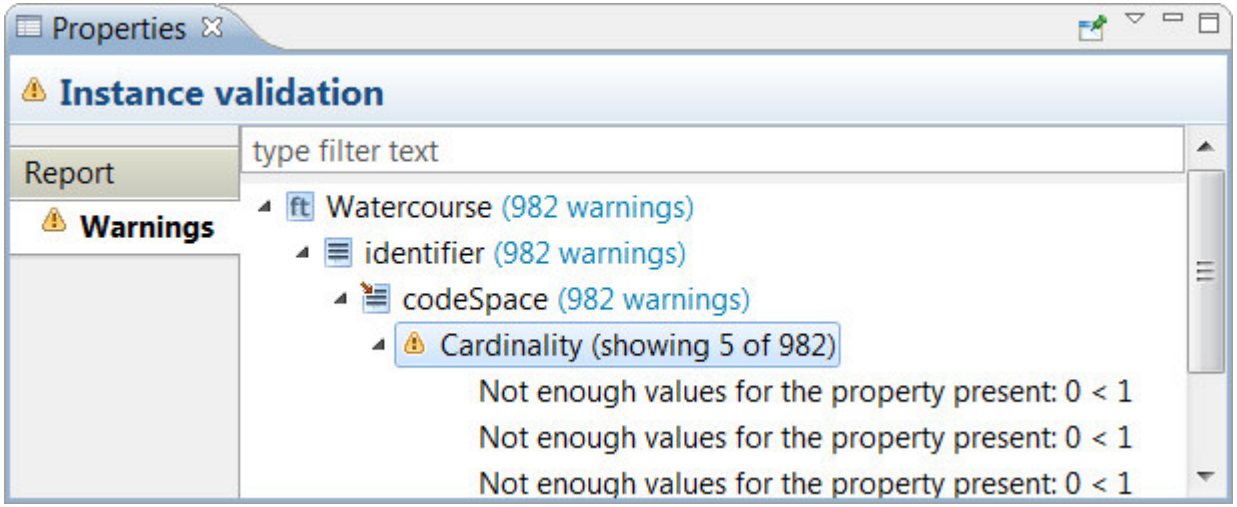
Dados – Harmonização - Hale Studio

- ✓ **Validação em instâncias carregadas no projeto Hale**
  - ✓ **Se existir mapeamento entre *Source* e *target Schema* e estiverem dados carregados, cada nova relação vai despoletar o *Live Transformation* (Se ativado) que vai fazer uma validação baseada no *Schema* em cada instância.**





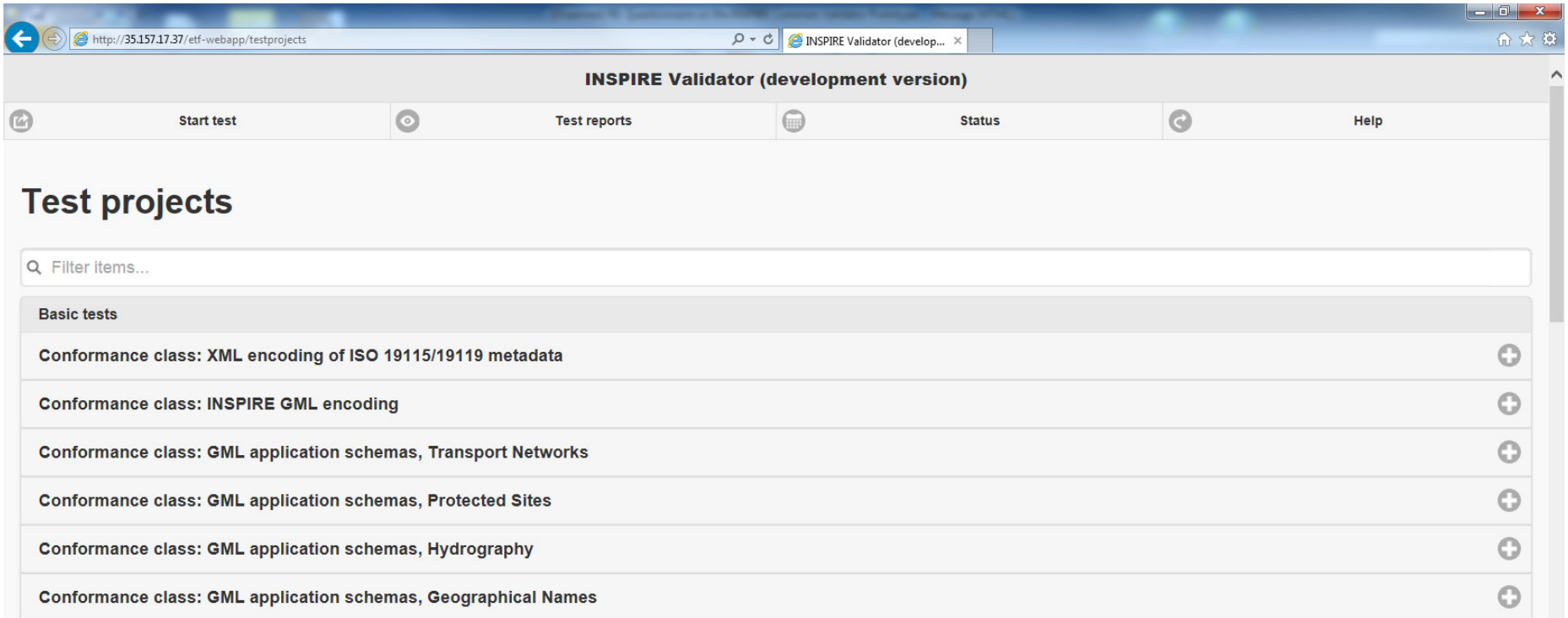
Dados – Harmonização - Hale Studio



- ✓ **Esta validação no projeto do Hale Studio é bastante conveniente, mas pode não ser tão precisa no caso da exportação, para alguns casos.**
- ✓ **Com muitos registos carregados no projeto pode ser moroso.**
  - ✓ **A exportação pode alterar ligeiramente o resultado, por exemplo, codificações que só são replicadas ao escrever certas propriedades ou identificadores gerados quando não existem.**

INSPIRE Validator (development version)

- ✓ **Validador online da CE, <u>ainda em fase de desenvolvimento</u>**
- ✓ **Tem como objectivo validar:**
  - ✓ **Serviços de descarregamento (*Atom feed* e *WFS*)**
  - ✓ **Registos de metadados**
  - ✓ **Conjunto de dados (harmonizados)**



INSPIRE Validator (development version)

The development version of the INSPIRE validator is available at

http://35.157.17.37/etf-webapp/

username: ******
password: **

… mudou de endereço…

Menu *Help*:

Quick start guide

This document serves as a quick start guide for users of the INSPIRE validator.

The INSPIRE requirements to be tested are grouped in several Conformance Classes that cover specific aspects. In order to be conformant to a specific Conformance Class, a service, a metadata record or a data set has to pass all tests that are defined for that Conformance Class. The INSPIRE validator provides a Test Suite for each Conformance Class.

Tests for INSPIRE:

- Download services
- Metadata records
- Data sets

Serviços de descarregamento (Atom, WFS)
Metadados
CDG

Last updated 2017-04-26 16:05:11 CEST

~~**Serviços de visualização (WMS)**~~

INSPIRE Validator (development version)

ETF – A test framework for testing SDI services, datasets and metadata

ELF EUROPEAN LOCATION FRAMEWORK

- Builds on existing, widely used open source tools
- Extends these tools with additional capabilities

- Can be used in multiple ways
  - Tests can be executed using the ETF Web Application or directly in SoapUI or BaseX
  - ELF uses a centrally deployed ETF instance, but local deployments by a service provider are supported, too
- **ETF is the basis of the INSPIRE validator** currently under development for JRC as part of the ARE3NA project to support INSPIRE implementation in the Member States

EuroGeographics CONNECTING YOU TO THE AUTHORITATIVE GEO-INFORMATION FRAMEWORK FOR EUROPE

INSPIRE Validator (development version)

Manual de instruções: http://docs.etf-validator.net/User_manuals/Simplified_workflows.html

Table of contents

interactive instruments

ETF
testing framework for geo network services and data

User manual for central deployments

Status	in review
Date	2017-04-20
Description	This manual is intended for users who are using a centrally deployed validator for testing geo network services and data.
Licence	Creative Commons Attribution (cc-by) 4.0
Identifier	https://github.com/interactive-instruments/etf-webapp/tree/master/docs/User_manuals/Simplified_workflows.adoc
Language	EN

Changelog

Date	Editor	Comments
2017-04-20	Jon Herrmann	document created

1. Scope

This manual is intended for users that are using a centrally deployed validator to test geo network services and data. Services must be accessible via the internet but can be protected with the HTTP basic authentication mechanism. Small test data sets can be uploaded or downloaded by the validator by providing an URL.

The default upload limit for data sets is 500 Megabytes but may be changed by the system administrator.

INSPIRE Validator (development version)

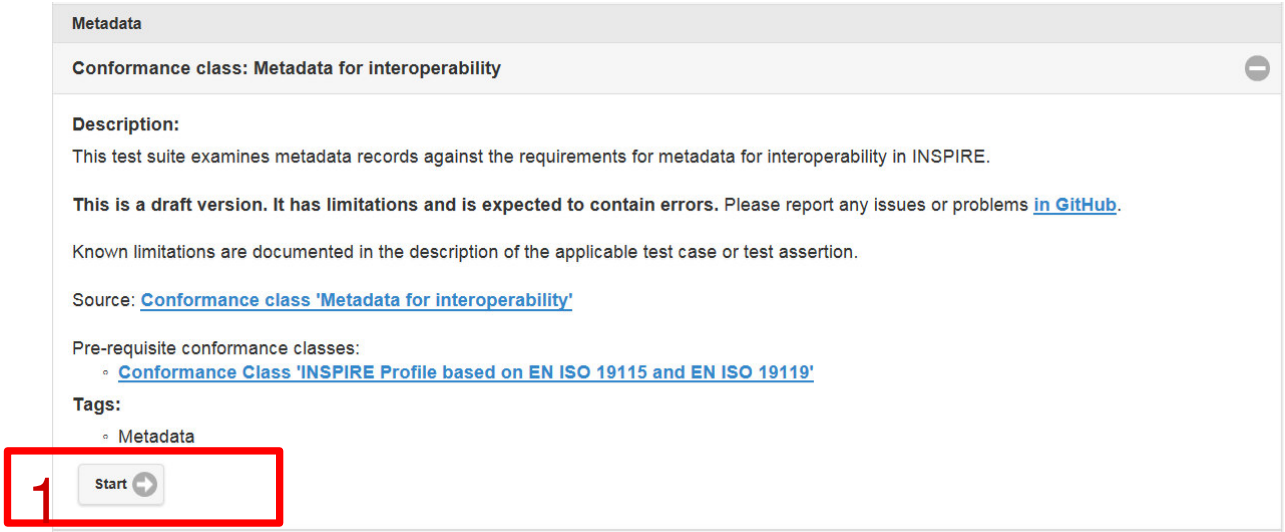
- ✓ **Os requisitos INSPIRE testados são agrupados em várias classes de conformidade que cobrem determinados aspectos específicos**

- ✓ **Para estar conforme com uma classe de conformidade (registo de metadados, CDG ou SDG) deve passar em todos os testes definidos para essa classe de conformidade**

- ✓ **O INSPIRE Validator disponibiliza um *Test Suite* para cada classe de conformidade**

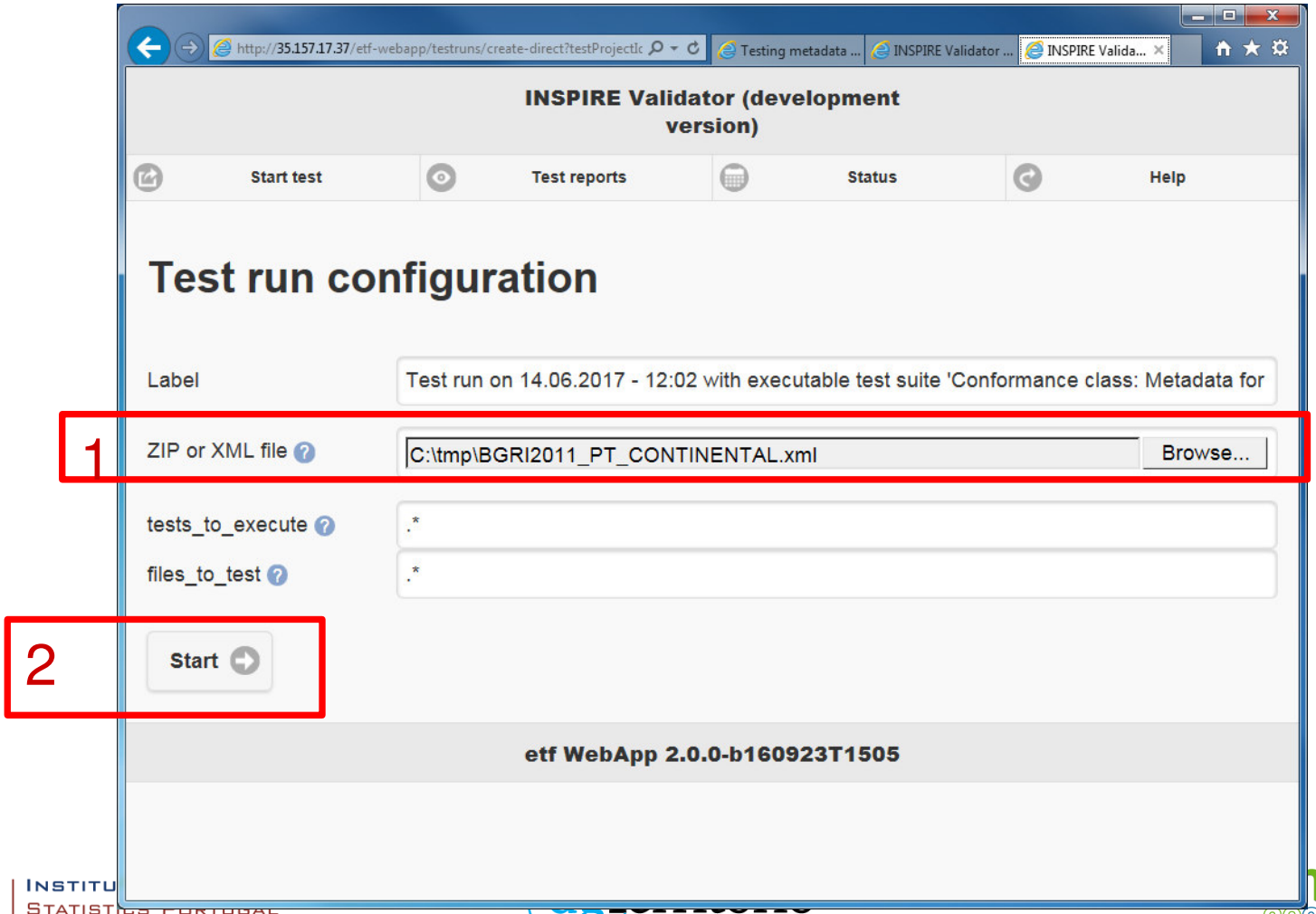
INSPIRE Validator (development version)

- ✓ **Como funciona?**
- ✓ **Deve indicar o teste que pretende executar e clicar em *Start***



INSPIRE Validator (development version)

✓ **Como funciona? Para qualquer teste…**



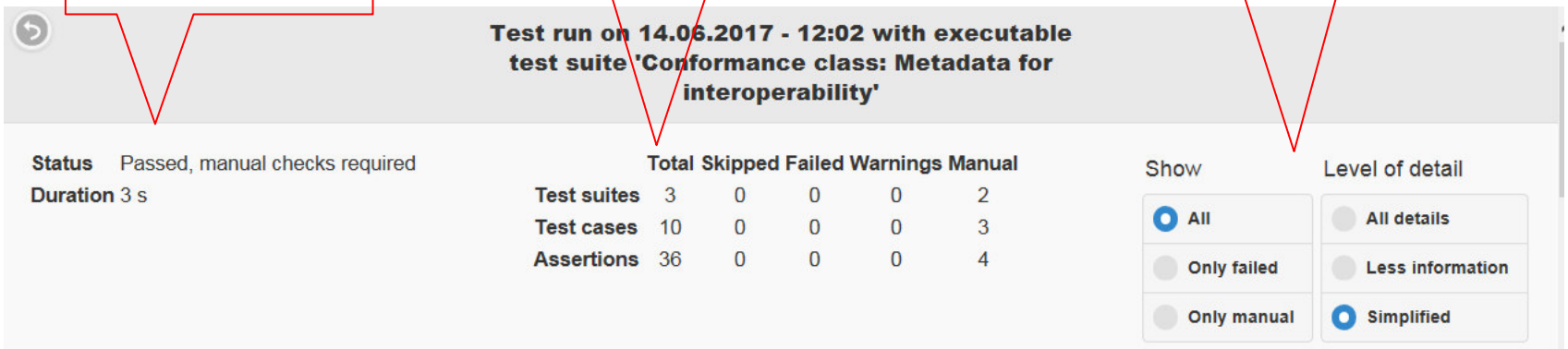
INSPIRE Validator (development version)

- ✓ **Resultado é um relatório onde…**
- ✓ **No topo aparece informação generalizada, com resultados gerais, designação do teste, duração**
- ✓ **Na próxima versão será possível voltar a abrir o relatório ou gravar com HTML**

Resultados gerais do relatório

Número de testes que falharam, avisos, ou verificações manuais

Personalização do relatório, mais ou menos detalhado, filtrar apenas erros ou verificações manuais



INSPIRE Validator (development version)

- ✓ **Os resultados estão organizados de uma forma hierárquica. Ao nível mais alto estão os *Test Suites* (Conjunto de testes).**

- ✓ **Ao clicar em um *Test Suites*  , surge uma descrição e todos os testes de nível inferior nesse conjunto são mostrados.**

- ✓ **As falhas num *Test Suite* podem ser imediatamente reconhecidas pela cor vermelha. O número de falhas ou erros é mostrado no canto superior direito.**

- ✓ **Em caso de erro ou validações manuais é indicado o que deve corrigir ou verificar manualmente, assim como o enquadramento teórico/legal**

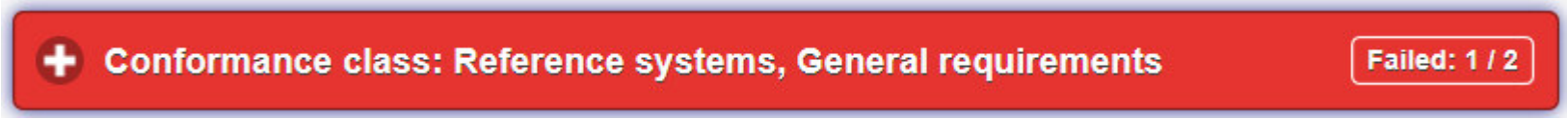
INSPIRE Validator (development version)

- ✓ **O Relatório utiliza um sistema de cores em que:**
  - ✓ **Verde – passou nos testes**

  - ✓ **Laranja – Necessita de verificações manuais.**

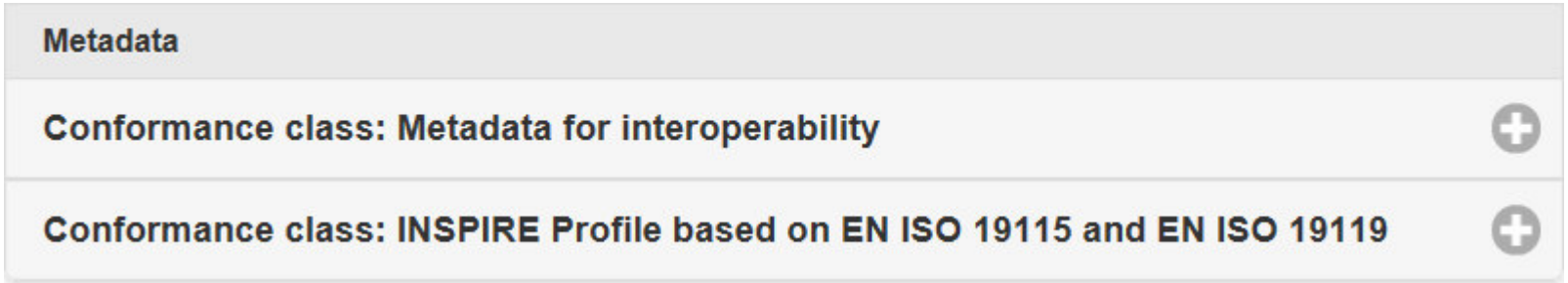
    Alguns requisitos de conformidade dificilmente serão automatizados, por outro lado os testes podem ser ignorados se dependerem de outros testes que já deram erro.

  - ✓ **Vermelho – Testes que deram erro**



INSPIRE Validator (development version)

- ✓ **Testar registos de metadados**
- ✓ **Os *metadata test Suites* estão na categoria *metadata***
- ✓ **Implementam *Technical guidance version 1.3*, versão 2.0 ainda não é suportada**
- ✓ **É possível testar um ou mais ficheiros de metadados ISO19115/19119**
- ✓ **Pode ser feito um *upload* dos ficheiros ou indicar um url**



INSPIRE Validator (development version)

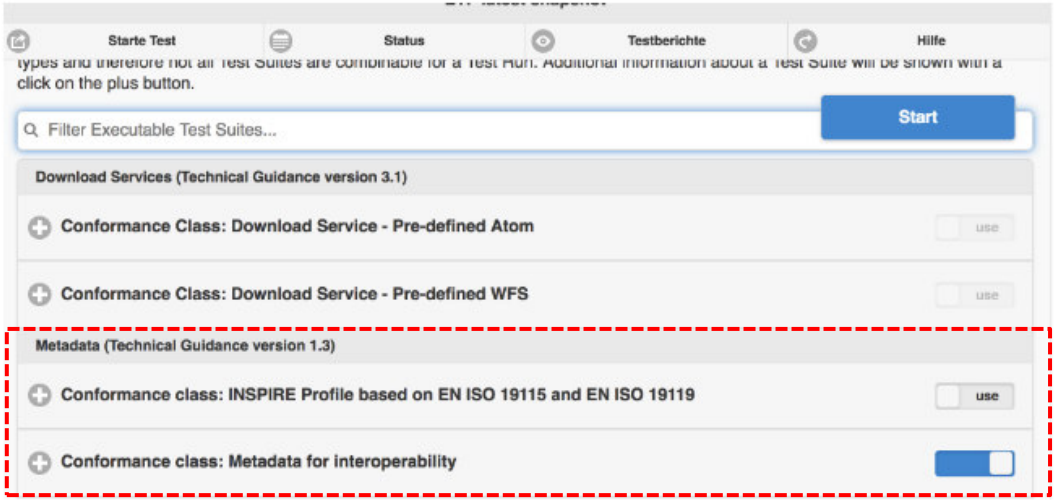
✓ Testar registos de metadados

Testing metadata records

The Metadata test suites are located in the category *Metadata (Technical Guidance version 1.3)*.

NOTE Version 2.0 of the technical guidance is not yet supported.

To test one or multiple **ISO 19115/19119 metadata encoded in XML** files, click on the 'use' flip switch on the right-hand side of the Test Suite **Conformance class: Metadata for interoperability**. Afterwards click on "Start".



The files can either be uploaded or used remotely by the INSPIRE validator by providing an URL.

NOTE The Validator only accepts files with XML and GML file ending and ZIP files containing these two file types. All other files like schema files can not be used and are silently ignored by the Validator.

INSPIRE Validator (development version)

- ✓ **Testar Conjunto de dados**
- ✓ **Existem sete categorias para os temas de dados do Anexo I, uma para cada um dos seguintes temas:**
  1. **Endereços**
  2. **Unidades administrativas**
  3. **Parcelas cadastrais**
  4. **Toponímia**
  5. **Hidrografia**
  6. **Sítios protegidos**
  7. **Redes de transporte**
- ✓ **A categoria *Interoperable data sets in GML* contém *Test Suites* para classes de conformidade aplicáveis a todos os temas (Anexo I a III) codificados em GML.**
- ✓ **Todos os conjuntos de teste do Anexo I invocam automaticamente os conjuntos de testes nesta categoria.**

INSPIRE Validator (development version)

✓ Testar Conjunto de dados

File upload

If the files are locally stored on your system use the *Data source* selector in the *Configure Test Run* dialog and select **File Upload**.

After clicking on **Choose files** one or multiple files can be selected. The files are uploaded and the **Choose files** button becomes inactive. Once the upload finishes, the **Start** button can be clicked to start the test.

Further steps are described in the standard manual.

Reference remote files by URL

If the data is available on the web, they can be tested by entering a single URL. Use the *Data source* selector and select **Remote file (URL)** in the *Configure Test Run* dialog.

Then enter the URL to either one XML, GML or ZIP file - or the URL of a query to your download service that returns one of these file types. If the URL requires authentication, username and password can be provided by clicking on *Credentials*.

Afterwards start the test by clicking on **Start**

Further steps are described in the standard manual.

Testing data sets

There are seven categories for the Annex I data themes, one for each theme that specifies spatial objects:

- Addresses
- Administrative Units
- Cadastral Parcels
- Geographical Names
- Hydrography
- Protected Sites
- Transport Networks

GTI-TE-9

GTI-TE-2

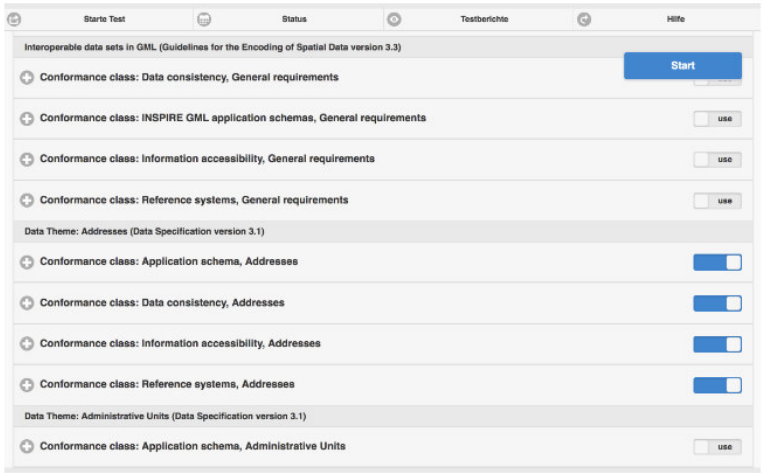
GTI-TE-9

Anexo I

Additionally, there is the *Interoperable data sets in GML* category which contains test suites for conformance classes applicable to all interoperable data sets encoded in GML, for any INSPIRE data theme. All Annex I test suites invoke automatically the test suites in this category.

To validate an INSPIRE data set in GML for full conformance, select all test suites in the appropriate category. For example, for a data set containing addresses scroll to the **Data Theme: Addresses (Data Specification version 3.1)** category and select all 4 conformance classes by clicking on the 'use' flip switch on the right-hand side:

- Application schema, Addresses
- Data consistency, Addresses
- Information accessibility, Addresses
- Reference systems, Addresses



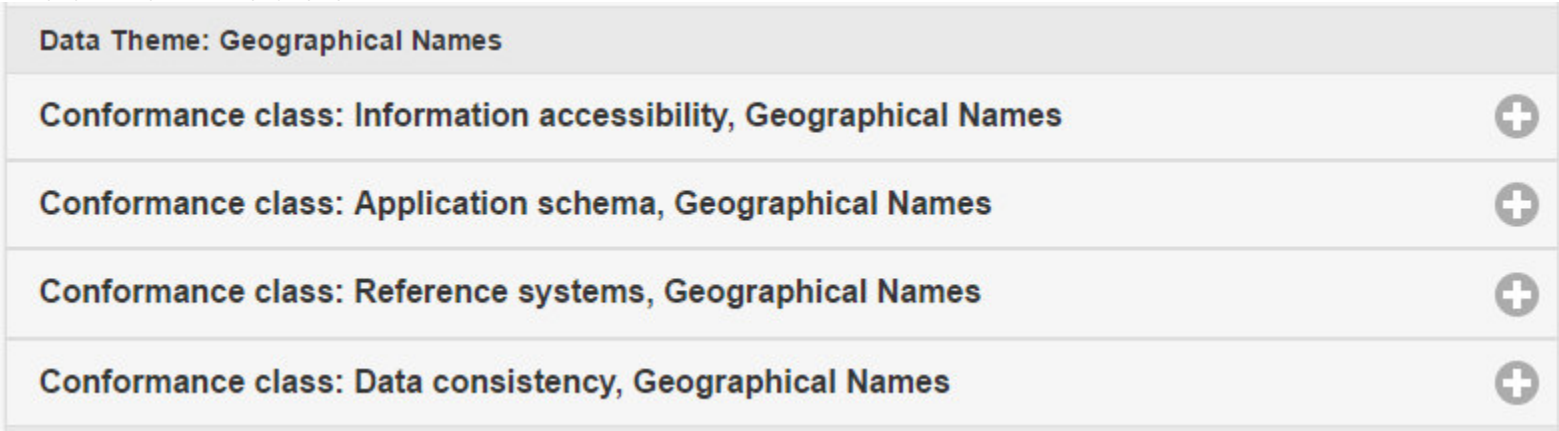
Afterwards click on the **Start** button.

The files can either be uploaded or used by the INSPIRE validator by providing a URL.

NOTE The Validator only accepts files with XML and GML file extension and ZIP files containing these two file types. All other files like schema files cannot be used and are silently ignored by the Validator!

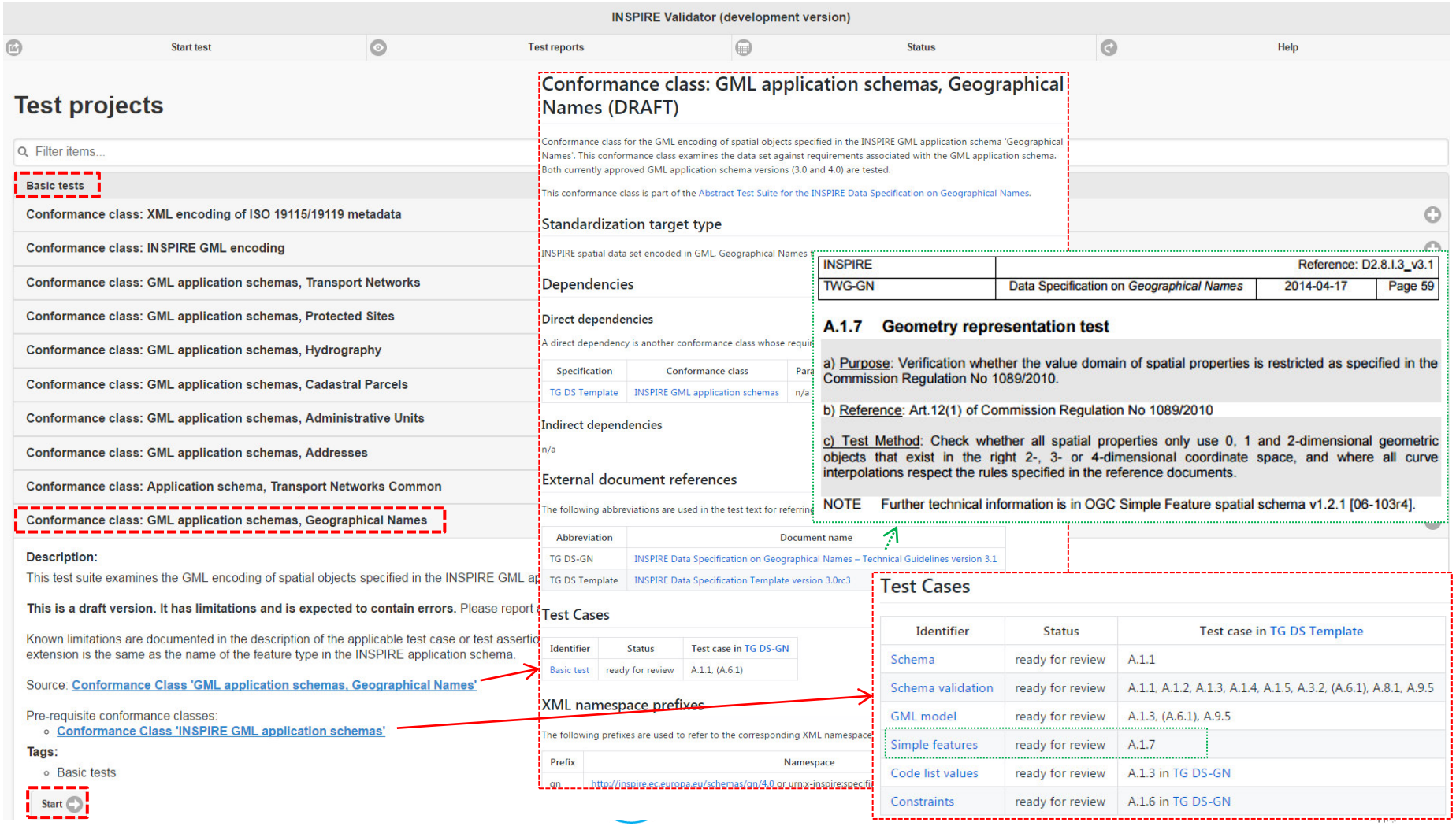
INSPIRE Validator (development version)

- ✓ **Testar Conjunto de dados (aplicado à Toponímia – anexo I)**
- ✓ **Para um conjunto de dados INSPIRE, codificado em GML, estar em total conformidade deve executar e passar todos os *Test Suites* na categoria apropriada.**
- ✓ **Por exemplo, para um CDG de toponímia deve ir à categoria:**
  - ✓ **Basic tests - Este conjunto de testes examina a codificação GML de objetos espaciais especificados nos esquemas de aplicação INSPIRE GML "Nomes geográficos"**
  - ✓ ***Data Theme: Geographical Names e* executar as 4 classes de conformidade**



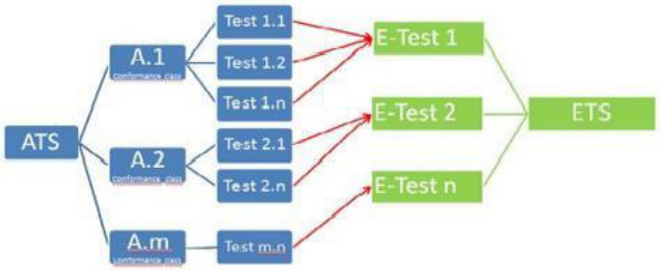
INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)



INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)



- **Anexo A das especificações de dados**
  - Abstract Test Suite (ATS):
    - Grupo 1 – normativo
    - Grupo 2 – informativo
  - Agrupados em diferentes classes de conformidade
  - Executable Test Suits (ETS):
    - implementam os ATS especificados pela Diretiva INSPIRE
- **Validação automática do GML com os seguintes esquemas:**
  - GeographicalNames.xsd (valida o GML application schema)
  - GML Schematron 3.2.1 (valida a estrutura do GML 3.2.1 – ISO 19136)
  - Schematron temático (valida o "conteúdo dos dados")
- **Validação manual do GML**
  - Verificação manual da existência no gml, das características especificadas pelos ATS

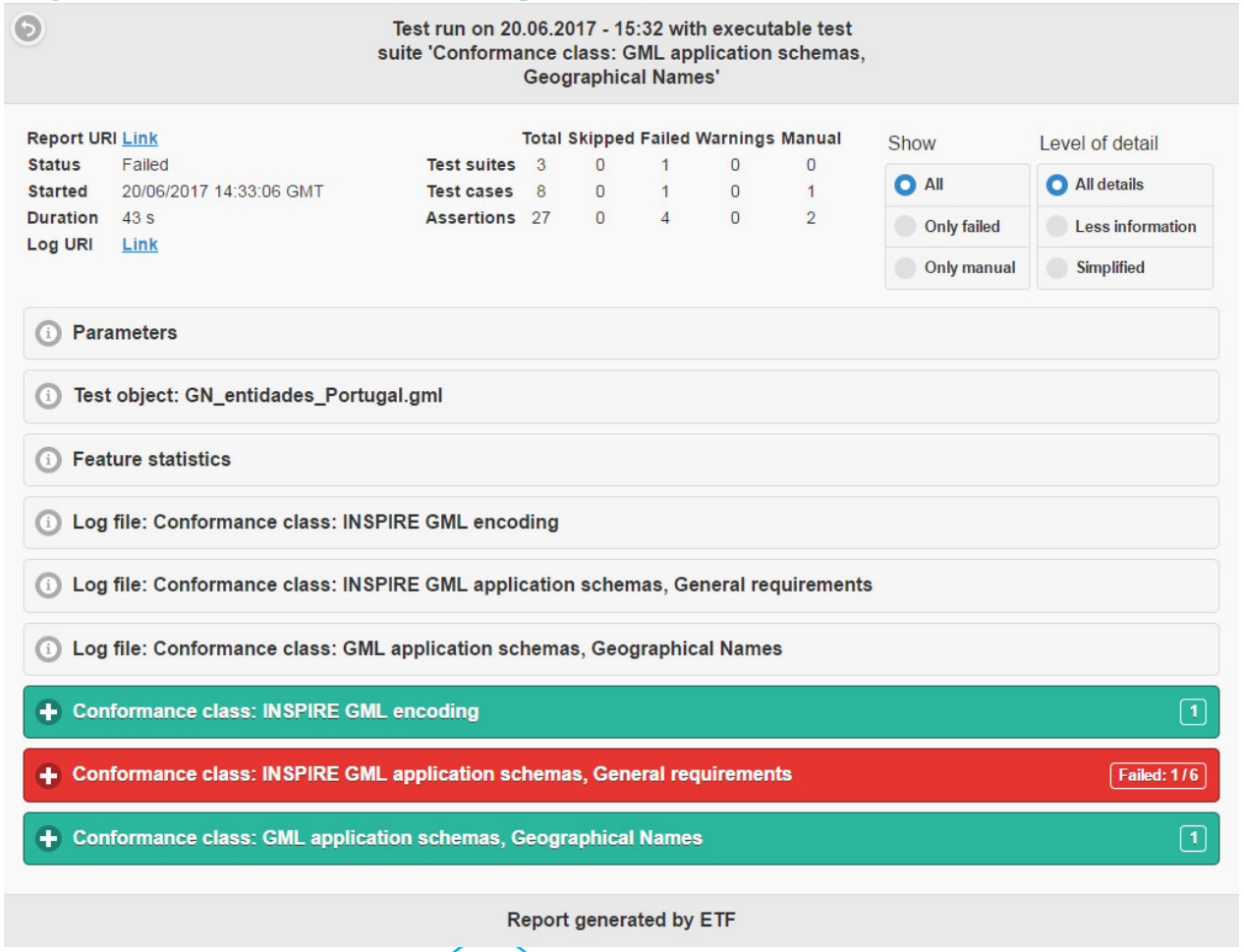
Estrutura do GML (3.2.1) - Verifica a conformidade do CDG com as especificações do GML (encoding rules), versão 3.2.1 no caso do INSPIRE. O ficheiro schematron constraints contém as especificações para o GML 3.2.1 de acordo com a ISO 19136 e encontra-se disponível no seguinte endereço: http://schemas.opengis.net/gml/3.2.1/SchematronConstr aints.xml

Schematron - linguagem de validação baseada em regras que verificam a presença ou ausência de padrões nas estruturas XML.

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 Grid test	E.2
		A.2.4 View service CRS test	E.2
		A.2.5 Temporal reference system test	E.2
		A.2.6 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 Life cycle time sequence test*	E.1
		A.3.4 Validity time sequence test *	E.1
		A.3.5 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.5.4 Grid identification test	E.5
	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
Part 2 (informative)	A.8 Technical Guideline Conformance Class	A.8.1 Multiplicity test	E.1
		A.8.2 CRS http URI test	E.7
		A.8.3 Metadata encoding schema validation test	E.8
		A.8.4 Metadata occurrence test	E.8
		A.8.5 Metadata consistency test	E.8
		A.8.6 Encoding schema validation test	E.1
		A.8.7 Coverage multipart representation test	E.9
		A.8.8 Coverage domain consistency test	E.9
		A.8.9 Style test	E.10

INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)



Test run on 20.06.2017 - 15:32 with executable test suite 'Conformance class: GML application schemas, Geographical Names'

Report URI	Link
Status	Failed
Started	20/06/2017 14:33:06 GMT
Duration	43 s
Log URI	Link

	Total	Skipped	Failed	Warnings	Manual
Test suites	3	0	1	0	0
Test cases	8	0	1	0	1
Assertions	27	0	4	0	2

Show: All / Only failed / Only manual

Level of detail: All details / Less information / Simplified

- Parameters
- Test object: GN_entidades_Portugal.gml
- Feature statistics
- Log file: Conformance class: INSPIRE GML encoding
- Log file: Conformance class: INSPIRE GML application schemas, General requirements
- Log file: Conformance class: GML application schemas, Geographical Names
- Conformance class: INSPIRE GML encoding 1
- Conformance class: INSPIRE GML application schemas, General requirements Failed: 1 / 6
- Conformance class: GML application schemas, Geographical Names 1

Report generated by ETF

INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia) – Avaliar erros

Code list values in basic data types — Failed: 4 / 4

Verify whether all attributes whose value type is a code list take the values set out therein. This is usually part of the tests of the corresponding application schema. However, for data types that are used across the INSPIRE application schemas, this is best done in this test suite to avoid duplicating the same test in many test suites. The relevant data types for the Annex I data themes with code list values are: GeographicalName.

Status Failed
Duration 2.686 s

- gmlas.e.1: GrammaticalNumber attributes
- gmlas.e.2: GrammaticalGender attributes
- gmlas.e.3: NameStatus attributes

When an attribute has a code list as its type, verify that the values comply with the definitions and include the values set out in Annex II of the regulat
in code list http://inspire.ec.europa.eu/codelist/NameStatusValue.
For datasets using version 3 of the GML application schema, the value is the last path element of the code list value URI and it is in the child text nod
schema, the value is in the xlink:href XML attribute and is the HTTP URI of the code list value.

Relevant requirements:

- IR Requirement Article 4 (1): Types for the Exchange and Classification of Spatial Objects. For the exchange and classification of spatial objects
  Article 4 of Directive 2007/2/EC, Member States shall use the spatial object types and associated data types, enumerations and code lists that
  data sets relate to.
- IR Requirement Article 4 (3): Types for the Exchange and Classification of Spatial Objects. The enumerations and code lists used in attributes q
  types shall comply with the definitions and include the values set out in Annex II. The enumeration and code list values are uniquely identified by
  The values may also include a language-specific name to be used for human interaction.
- IR Requirement Article 6 (1): Code Lists and Enumerations. Codelists shall be of one of the following types, as specified in the Annexes:
  1. code lists whose allowed values comprise only the values specified in this Regulation;
  2. code lists whose allowed values comprise the values specified in this Regulation and narrower values defined by data providers;
  3. code lists whose allowed values comprise the values specified in this Regulation and additional values at any level defined by data provide
  4. code lists, whose allowed values comprise any values defined by data providers.

  For the purposes of points 2, 3 and 4, in addition to the allowed values, data providers may use the values specified in the relevant INSPIRE Te
  web site of the Joint Research Centre.
- IR Requirement Article 6 (2): Code Lists and Enumerations. Code lists may be hierarchical. Values of hierarchical code lists may have a more g
  hierarchical code list are specified in a table in this Regulation, the parent values are listed in the last column.
- IR Requirement Article 6 (3): Code Lists and Enumerations. Where, for an attribute whose type is a code list as referred to in points 2, 3 or 4 of
  not specified in this Regulation, that value and its definition shall be made available in a register.
- IR Requirement Article 6 (4): Code Lists and Enumerations. Attributes or association roles of spatial object types or data types whose type is a
  according to the specification of the code list.

Source: Abstract Test Case 'Code list values'

Status Failed
Duration 0.436 s

Messages

There are too many errors to determine all errors. Only the first 1000 errors in the system under test are analysed.
The dataset has 1000 feature(s) with errors for this assertion.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29818': The property 'nameStatus' has a value 'official' that is not one of the allowed values listed at http://inspire.ec.europa.eu/codelist/NameStatusValue.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29819': The property 'nameStatus' has a value 'official' that is not one of the allowed values listed at http://inspire.ec.europa.eu/codelist/NameStatusValue.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29820': The property 'nameStatus' has a value 'official' that is not one of the allowed values listed at http://inspire.ec.europa.eu/codelist/NameStatusValue.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29821': The property 'nameStatus' has a value 'official' that is not one of the allowed values listed at http://inspire.ec.europa.eu/codelist/NameStatusValue.

Code list values

Version: 1

Purpose: Verify whether all attributes whose value type is a code list take the values set out therein

Prerequisites

Test method

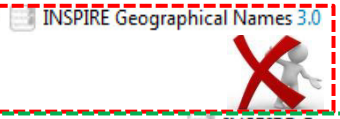
When an attribute has a code list as its type, verify that the values comply with the definitions and include the values set out in Annex II of the regulation. To pass this tests that any instance of an attribute

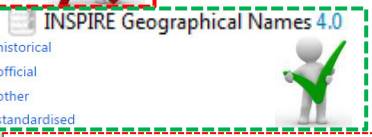
- takes only values explicitly specified in the INSPIRE code list register when the code list's extensibility is 'none'.

Otherwise report disallowedCodeListValue.

For the commonly used data types, the following properties have to be tested:

- Nativeness (v3) in GeographicalName. Valid values:
  - endonym
  - exonym
- Nativeness (v4) in GeographicalName. Valid values:
  - http://inspire.ec.europa.eu/codelist/NativenessValue/endonym
  - http://inspire.ec.europa.eu/codelist/NativenessValue/exonym
- NameStatus (v3). Valid values:
  - official
  - standardised
  - historical
  - other
- NameStatus (v4) in GeographicalName. Valid values:
  - http://inspire.ec.europa.eu/codelist/NameStatusValue/historical
  - http://inspire.ec.europa.eu/codelist/NameStatusValue/official
  - http://inspire.ec.europa.eu/codelist/NameStatusValue/other
  - http://inspire.ec.europa.eu/codelist/NameStatusValue/standardised





INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)

- ✓ **exemplo da classe *Reference systems***

Data Theme: Geographical Names

Conformance class: Information accessibility, Geographical Names

Conformance class: Application schema, Geographical Names

Conformance class: Reference systems, Geographical Names

Description:

This test suite examines a data set against the theme-specific requirements relate
and temporal, units of measurement).

This is a draft version. It has limitations and is expected to contain errors.
problems in GitHub.

Known limitations are documented in the description of the applicable test case o
limitation in all assertions that extensions in additional application schemas are or
name of the feature type in the extension is the same as the name of the feature
schema.

Source: Conformance Class 'Reference systems, Geographical Names'

Pre-requisite conformance classes:

- Conformance Class 'Reference systems'

Tags:

- Data Theme: Geographical Names

Start

Conformance class: Data consistency, Geographical Names

Conformance class: Reference systems (DRAFT)

Conformance class for general requirements associated with reference systems (spatial and temporal, units of measurement).

To be able to test this conformance class, the encoding of the data set must be known, i.e. this is a parameterized conformance class. The XPath expressions used in this test suite assume that the GML encoding is used. If used with the GML encoding this conformance class has an indirect dependency to the conformance class "INSPIRE GML application schemas".

This conformance class is part of the Abstract Test Suite for the INSPIRE Data Specification Template.

Standardization target type

INSPIRE spatial data set

Dependencies

Direct dependencies

none

Indirect dependencies

An indirect dependency is another conformance class whose requirements must be met by a related resource.

Specification	Conformance class	Related resource	Parameters
TG DS_tmpl	INSPIRE GML application schemas	INSPIRE spatial data set encoded in GML	n/a

External document references

The following abbreviations are used in the test text for referring to external documents:

Abbreviation	Document name
TG DS Template	INSPIRE Data Specification Template version 3.0rc3

Test Cases

Identifier	Status	Test case in TG DS Template
Spatial reference systems	ready for review	A.2.1, A.2.2, A.6.2, A.6.3, A.9.1
Temporal reference systems	ready for review	A.2.5

Spatial reference systems

Version: 1

Purpose: Verify that all references to spatial coordinate referenc
INSPIRE data sets.

Prerequisites

Test method

- Verify that all references to coordinate reference systems in
  listed in TG requirement 2, otherwise report unknownCRS1.
- Verify that all references to coordinate reference systems in
  one of the crsuris listed in TG requirement 2. Otherwise rep

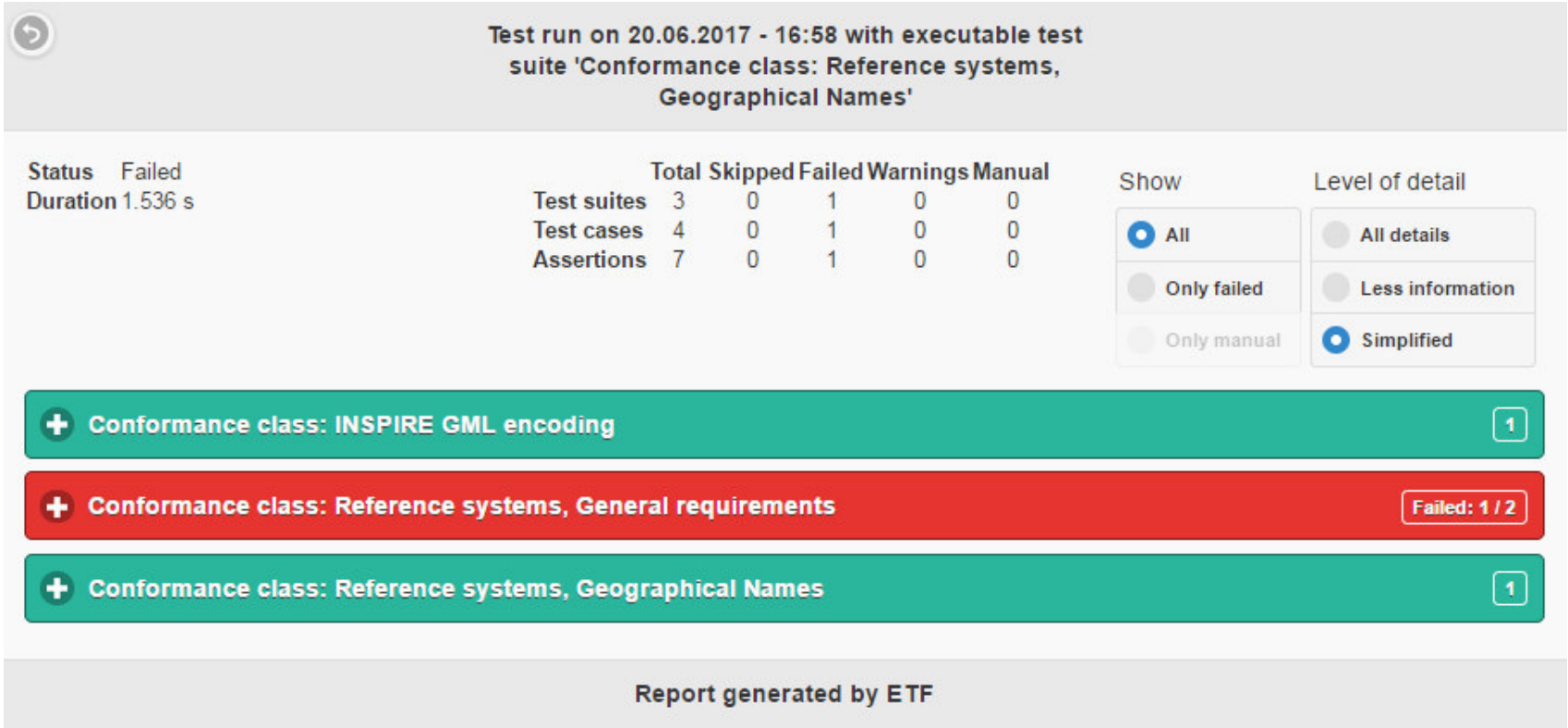
The list of valid coordinate reference system identifiers:

- http://www.opengis.net/def/crs/EPSG/0/4936
- http://www.opengis.net/def/crs/EPSG/0/4937
- http://www.opengis.net/def/crs/EPSG/0/4258
- http://www.opengis.net/def/crs/EPSG/0/3035
- http://www.opengis.net/def/crs/EPSG/0/3034
- http://www.opengis.net/def/crs/EPSG/0/3038
- http://www.opengis.net/def/crs/EPSG/0/3039
- http://www.opengis.net/def/crs/EPSG/0/3040
- http://www.opengis.net/def/crs/EPSG/0/3041
- http://www.opengis.net/def/crs/EPSG/0/3042
- http://www.opengis.net/def/crs/EPSG/0/3043
- http://www.opengis.net/def/crs/EPSG/0/3044
- http://www.opengis.net/def/crs/EPSG/0/3045
- http://www.opengis.net/def/crs/EPSG/0/3046
- http://www.opengis.net/def/crs/EPSG/0/3047
- http://www.opengis.net/def/crs/EPSG/0/3048
- http://www.opengis.net/def/crs/EPSG/0/3049
- http://www.opengis.net/def/crs/EPSG/0/3050
- http://www.opengis.net/def/crs/EPSG/0/3051
- http://www.opengis.net/def/crs/EPSG/0/5730
- http://www.opengis.net/def/crs/EPSG/0/7409

INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)

✓ *Data Theme: Geographical Names* - executar as 4 classes de conformidade (exemplo da classe *Reference systems*)



Test run on 20.06.2017 - 16:58 with executable test suite 'Conformance class: Reference systems, Geographical Names'

Status Failed
Duration 1.536 s

	Total	Skipped	Failed	Warnings	Manual
Test suites	3	0	1	0	0
Test cases	4	0	1	0	0
Assertions	7	0	1	0	0

Show: All / Only failed / Only manual

Level of detail: All details / Less information / Simplified

Conformance class: INSPIRE GML encoding 1

Conformance class: Reference systems, General requirements Failed: 1 / 2

Conformance class: Reference systems, Geographical Names 1

Report generated by ETF

INSPIRE Validator (development version)

✓ Testar Conjunto de dados (Toponímia)

Spatial reference systems — **Failed: 1 / 2**

Verify that all references to spatial coordinate reference systems are using one of the http URIs approved for use in INSPIRE data sets.

Status Failed
Duration 0.002 s
Test case ID EID3f6ab9e4-f76b-4043-9e0d-498293f41972

rs.a.1: Spatial reference systems in feature geometries

Verify that all references to coordinate reference systems in the features (srsName) use one of the approved CRS URIs listed in TG requirement 2.

Relevant requirements:

- IR Requirement Annex II Section 1.2: Datum for three-dimensional and two-dimensional coordinate reference systems. For the three-dimensional and two-dimensional coordinate reference systems and the horizontal component of compound coordinate reference systems used for making spatial data sets available, the datum shall be the datum of the European Terrestrial Reference System 1989 (ETRS89) in areas within its geographical scope, or the datum of the International Terrestrial Reference System (ITRS) or other geodetic coordinate reference systems compliant with ITRS in areas that are outside the geographical scope of ETRS89. Compliant with the ITRS means that the system definition is based on the definition of the ITRS and there is a well documented relationship between both systems, according to EN ISO 19111.
- IR Requirement Annex II Section 1.3: Datum for three-dimensional and two-dimensional coordinate reference systems. Spatial data sets shall be made

Notas:

- WMS, WFS podem conter vários sistemas de referência de coordenadas;

GML -> coordenadas num único sistema de referência de coordenadas

Utilizar em PT Continental:

- TG Requirement 2: The following identifiers shall be used for referring to the coo
  - http://www.opengis.net/def/crs/EPSG/0/4936
  - http://www.opengis.net/def/crs/EPSG/0/4937
  - http://www.opengis.net/def/crs/EPSG/0/4258
  - http://www.opengis.net/def/crs/EPSG/0/3034
  - http://www.opengis.net/def/crs/EPSG/0/3035
  - http://www.opengis.net/def/crs/EPSG/0/3038
  - http://www.opengis.net/def/crs/EPSG/0/3039
  - http://www.opengis.net/def/crs/EPSG/0/3040
  - http://www.opengis.net/def/crs/EPSG/0/3041
  - http://www.opengis.net/def/crs/EPSG/0/3042
  - http://www.opengis.net/def/crs/EPSG/0/3043
  - http://www.opengis.net/def/crs/EPSG/0/3044
  - http://www.opengis.net/def/crs/EPSG/0/3045
  - http://www.opengis.net/def/crs/EPSG/0/3046
  - http://www.opengis.net/def/crs/EPSG/0/3047
  - http://www.opengis.net/def/crs/EPSG/0/3048
  - http://www.opengis.net/def/crs/EPSG/0/3049
  - http://www.opengis.net/def/crs/EPSG/0/3050
  - http://www.opengis.net/def/crs/EPSG/0/3051
  - http://www.opengis.net/def/crs/EPSG/0/5730
  - http://www.opengis.net/def/crs/EPSG/0/7409

Source: Abstract Test Case 'Spatial reference systems'

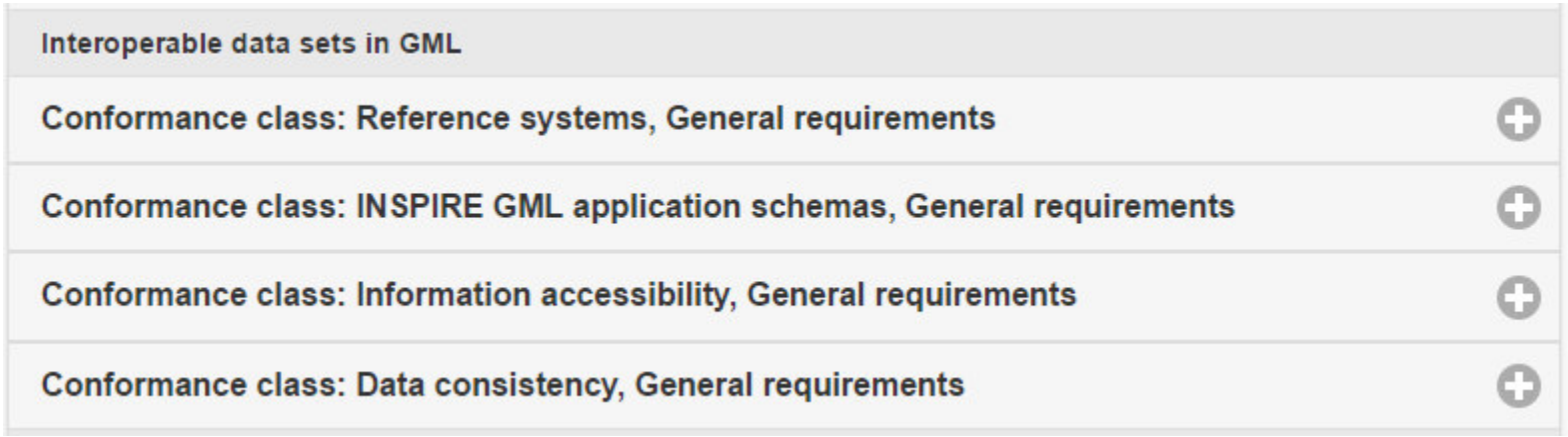
Messages

There are too many errors to determine all errors. Only the first 1000 errors in the system under test are analysed.
The dataset has 1000 feature(s) with errors for this assertion.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29818': A spatial geometry uses an unexpected coordinate reference system 'http://www.opengis.net/def/crs/EPSG/0/3763'.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29819': A spatial geometry uses an unexpected coordinate reference system 'http://www.opengis.net/def/crs/EPSG/0/3763'.
XML document 'GN_entidades_Portugal.gml', NamedPlace 'PT.GN.29820': A spatial geometry uses an unexpected coordinate reference system 'http://www.opengis.net/def/crs/EPSG/0/3763'.

EPSG:3763

INSPIRE Validator (development version)

- ✓ **Testar Conjunto de dados (anexo I, II e III)**
- ✓ **A categoria *Interoperable data sets in GML* contém *Test Suites* para classes de conformidade aplicáveis a todos os temas (Anexo I a III) codificados em GML.**



INSPIRE Validator (development version)

- ✓ **Testar Serviços de descarregamento**
- ✓ **Ainda não está disponível**

- ✓ **Será possível testar serviços com os requerimentos Pre-Defined Dataset Download Service using Atom ou *Pre-Defined Dataset Download Service using WFS***
- ✓ **Os testes estão na categoria Donwload Services (technical guidance version 3.1)**

  - ✓ **As classes de conformidade para *Direct Access Download Service using WFS* não especificam requisitos adicionais ao *OGC Web Feature Service standard.* Desta forma não é fornecido nenhum conjunto de testes.**

INSPIRE Validator (development version)

✓ Testar Serviços de descarregamento

Testing download services

You can either test a service against the requirements related to the *Pre-Defined Dataset Download Service using Atom* or test a service against the requirements related to the *Pre-Defined Dataset Download Service using WFS*.

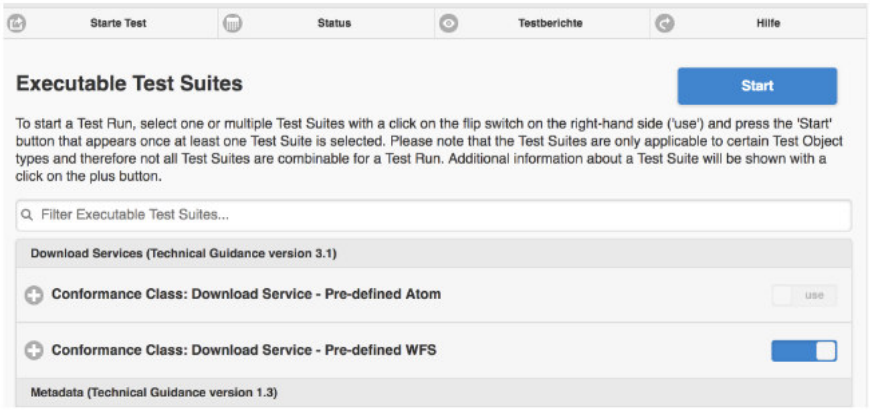
NOTE The conformance class for a *Direct Access Download Service using WFS* does not specify any requirements in addition to the requirements in the OGC Web Feature Service standard. Therefore, currently not test suite is provided for this conformance class until the relevant OGC WFS test suites are supported.

NOTE The conformance classes for coverage data (WCS) and observation data (SOS) are not yet supported.

The Download Service Tests are located in the category *Download Services (Technical Guidance version 3.1)*.

Pre-defined WFS

To test a **Pre-Defined Dataset Download Service** click on the 'use' flip switch on the right-hand side of the Test Suite **Conformance Class: Download Service - Pre-defined WFS**.



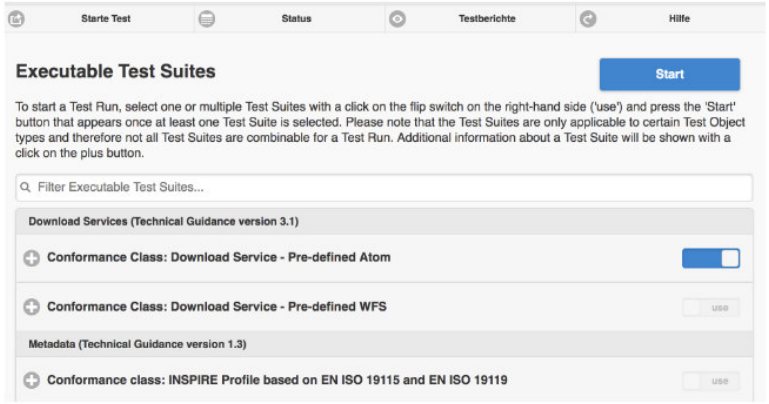
Afterwards click on "Start" and enter the URL of the Web Feature Service.

Start the Test Run by clicking on **Start**.

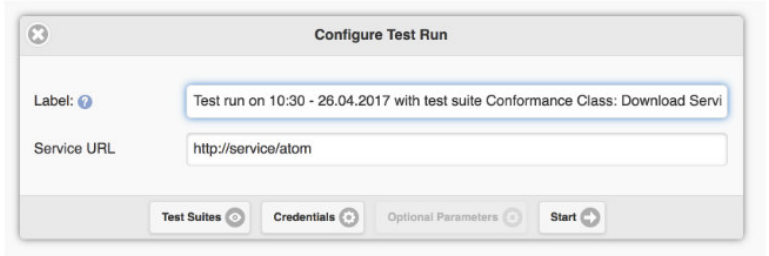
Further steps are described in the standard manual.

Atom

To test an **Atom Download Service feed** click on the 'use' flip switch on the right-hand side of the Test Suite **Conformance Class: Download Service - Pre-defined Atom**.



Afterwards click on "Start" and enter the URL of the Atom service feed.

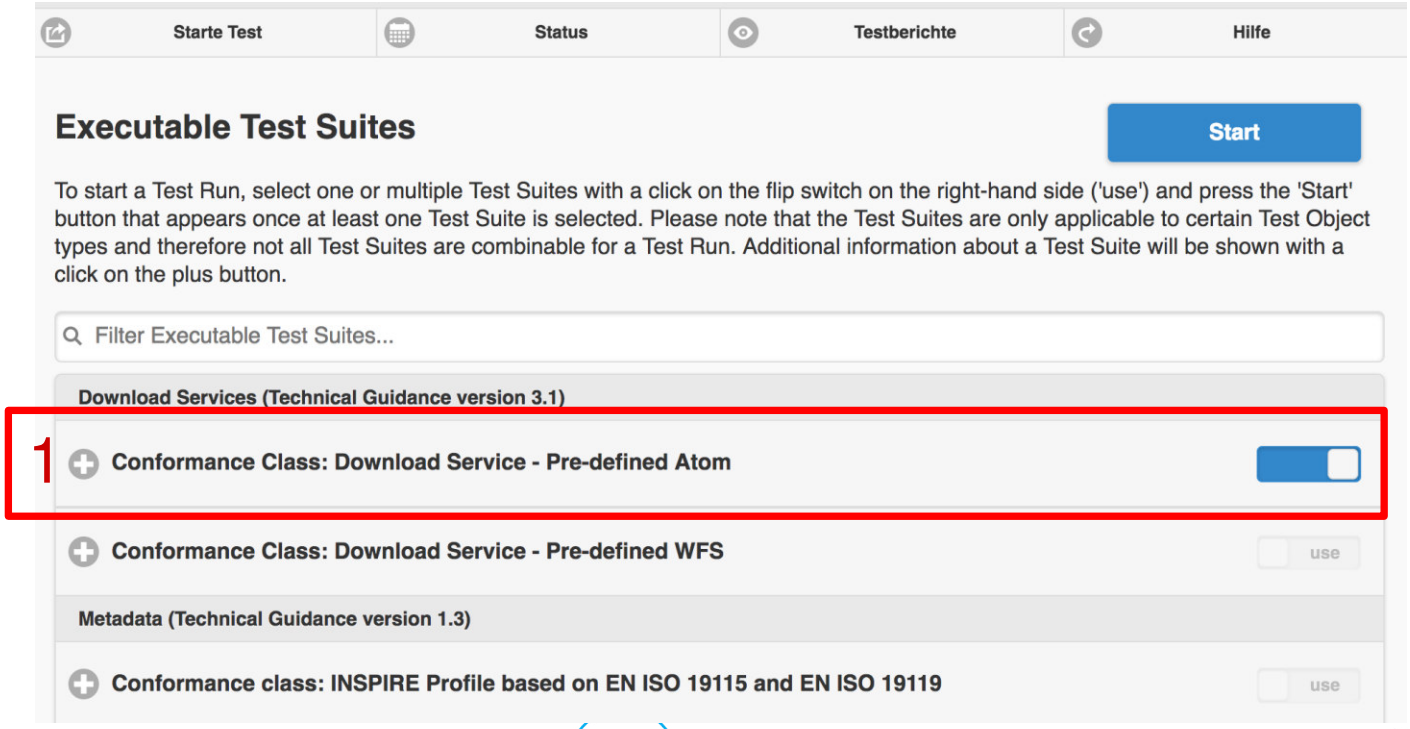


Start the Test Run by clicking on **Start**.

Further steps are described in the standard manual.

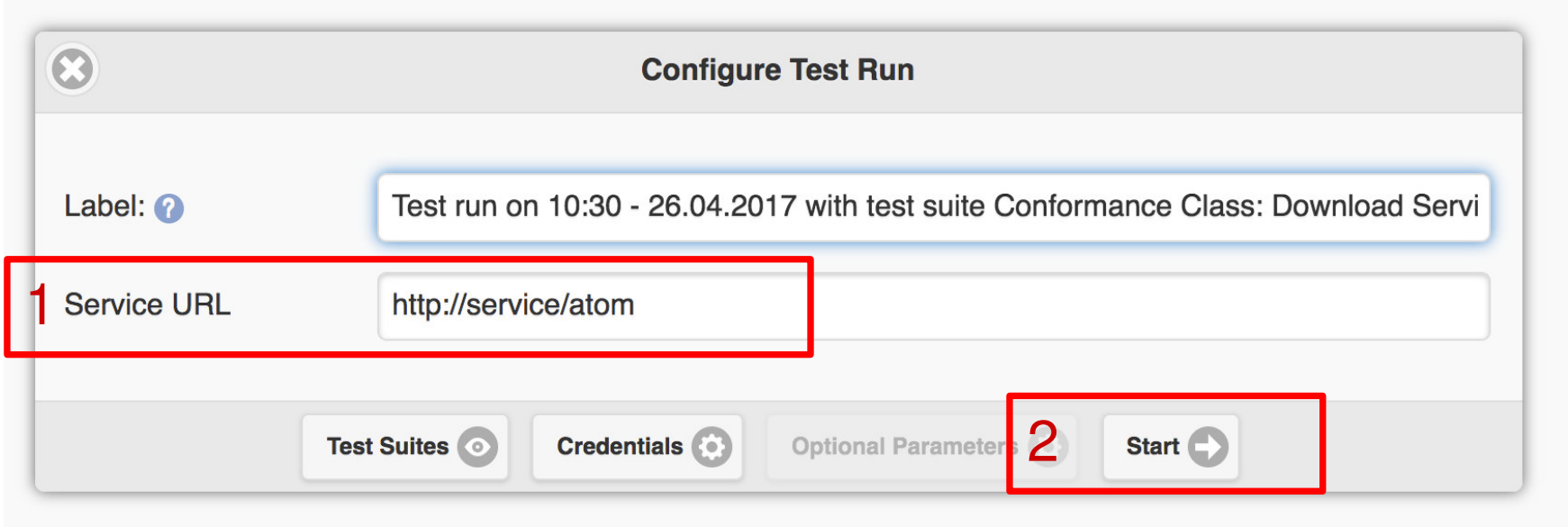
INSPIRE Validator (development version)

- ✓ **Testar Serviços de descarregamento - Atom**
- ✓ **É possível testar serviços com os requerimentos Pre-Defined Dataset Download Service using Atom**



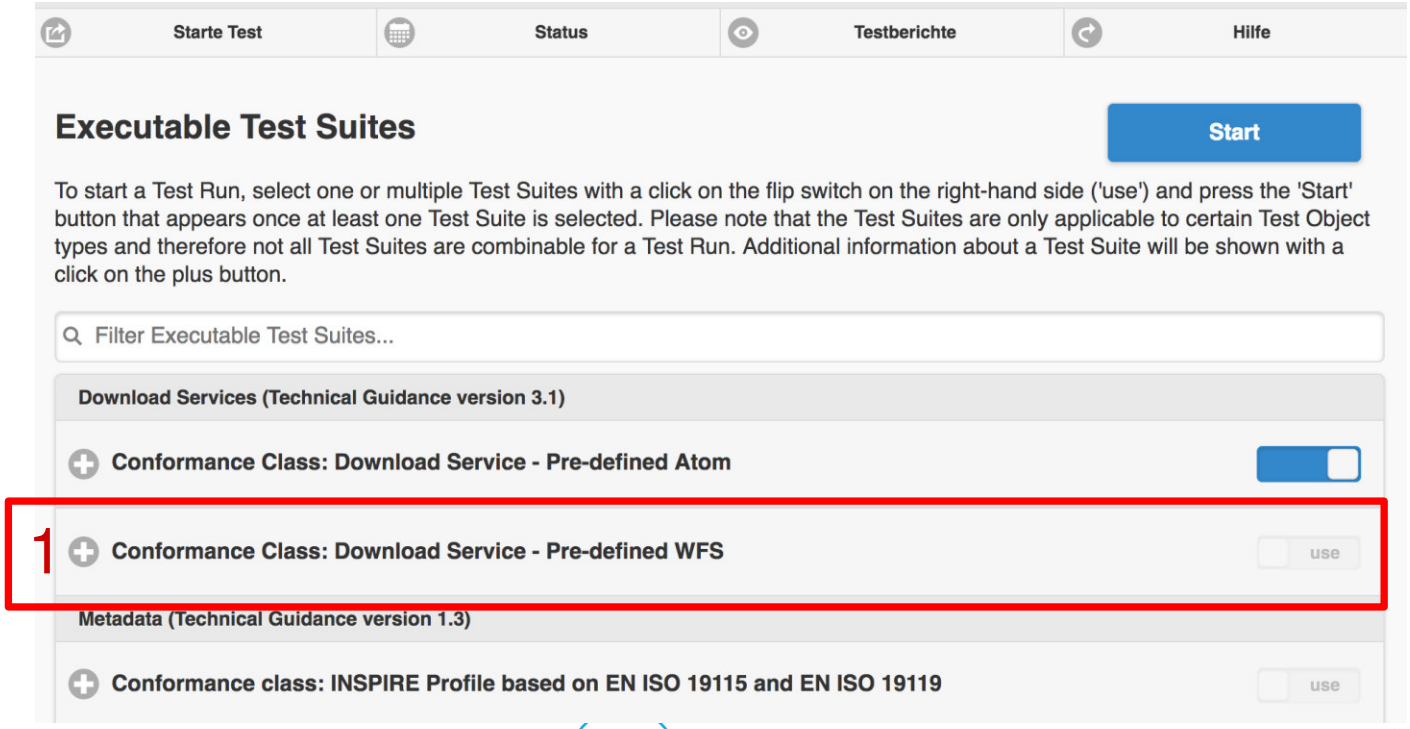
INSPIRE Validator (development version)

✓ Testar Serviços de descarregamento - Atom



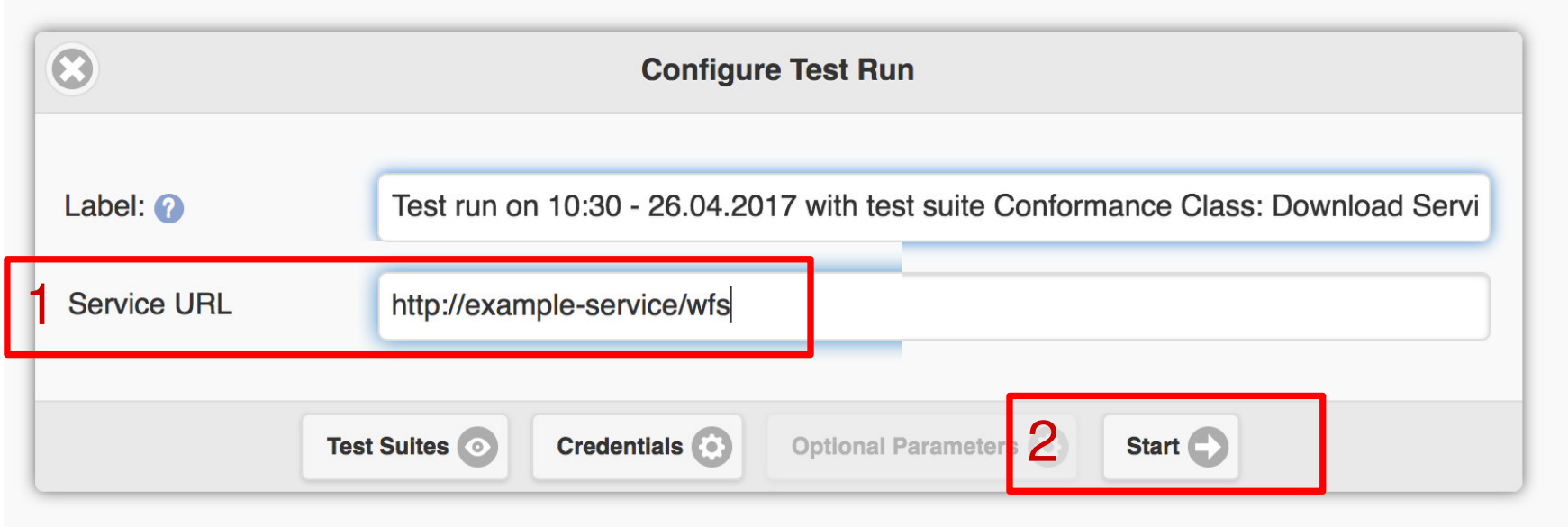
INSPIRE Validator (development version)

- ✓ **Testar Serviços de descarregamento - WFS**
- ✓ **É possível testar serviços com os requerimentos *Pre-Defined Dataset Download Service using WFS***



INSPIRE Validator (development version)

✓ Testar Serviços de descarregamento - WFS



Validação INSPIRE - Conclusões

- ✓ **A necessidade de ferramentas para validação (metadados, dados e serviços) aumenta à medida que se avança nas diferentes fases de implementação da diretiva INSPIRE.**

Para além dos validadores que agora apresentámos:

- ✓ **Existe um serviço de validação de metadados (Webservice) disponível no portal da EU;**
- ✓ **Alguns países também desenvolveram ferramentas para validação de metadados e serviços, por exemplo, na Holanda e na Alemanha**

- ✓ **Estes validadores podem incluir interpretações ligeiramente diferentes das normas. Para garantir que o resultado de um teste de conformidade seja idêntico, um validador comum, oficialmente aprovado, deve ser acedido pela web INSPIRE.**