MIWP-5: Validation & conformity testing – Overview & ATS Development

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Workshop on validation, Marne-la-Vallee, 2-3 June 2016

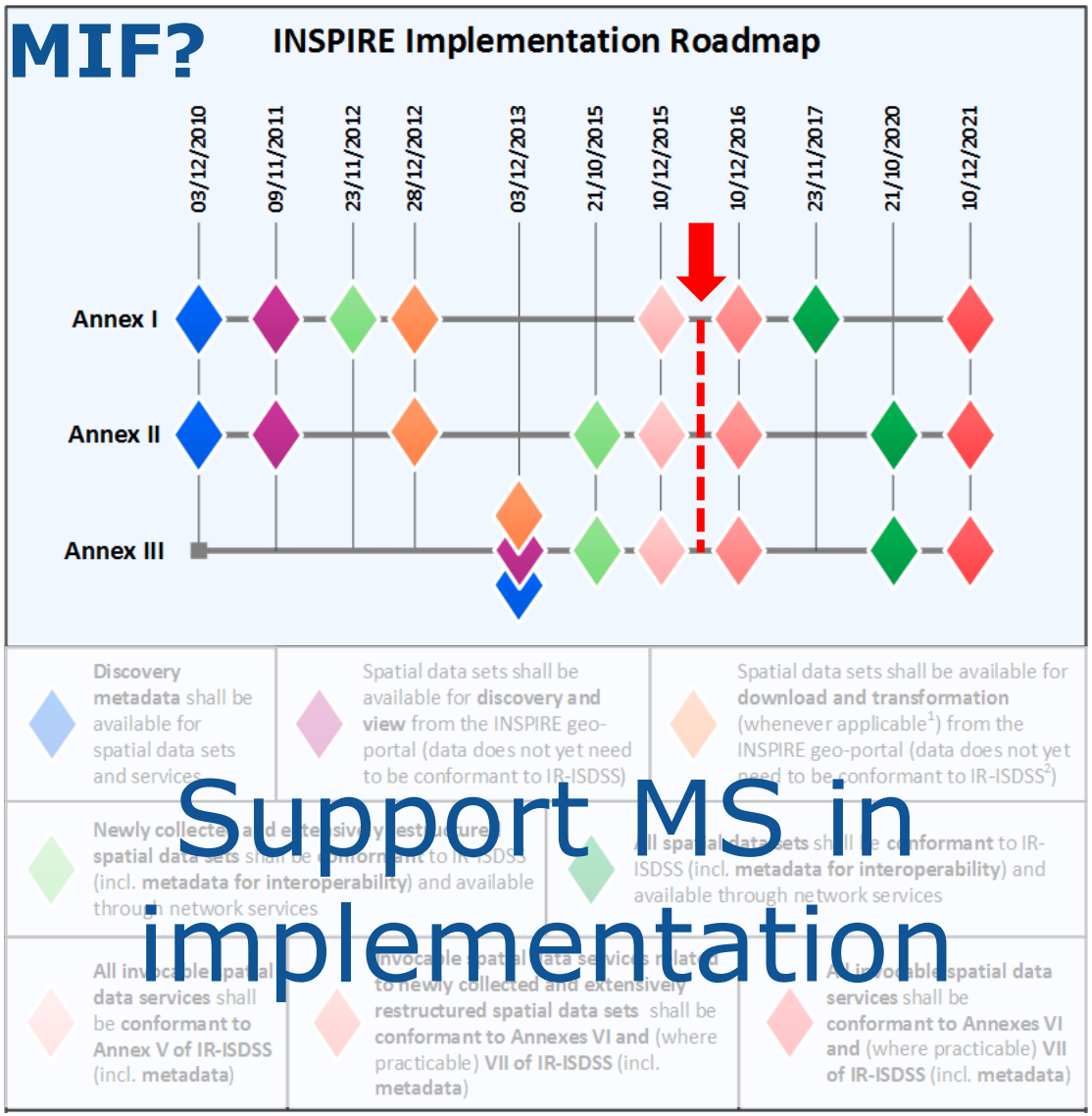
www.jrc.ec.europa.eu

Serving society
Stimulating innovation
Supporting legislation

Content

- The INSPIRE maintenance and implementation framework (MIF)
- Why an action on validation and conformity testing
- Current status & next steps
- ATS development

Why the MIF?



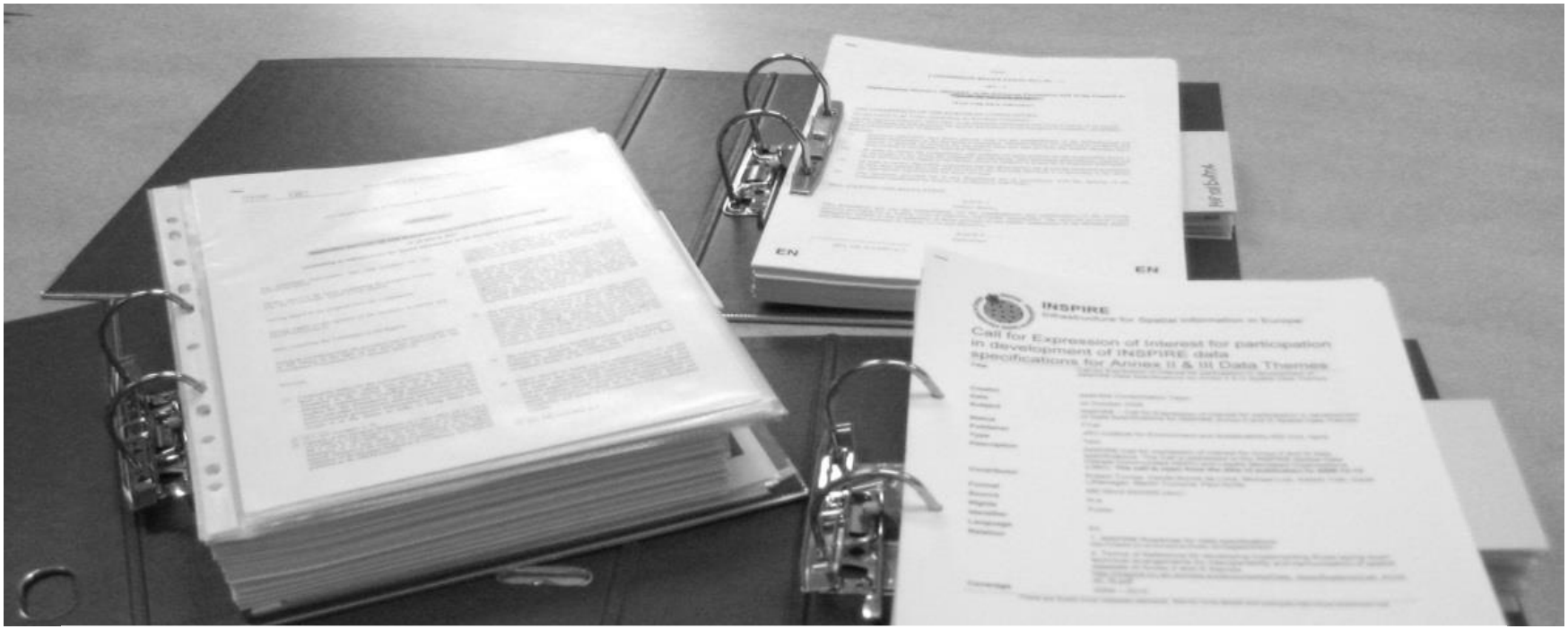
Support MS in implementation

Joint Research Centre

http://inspire.jrc.ec.europa.eu/index.cfm/pageid/44

European Commission

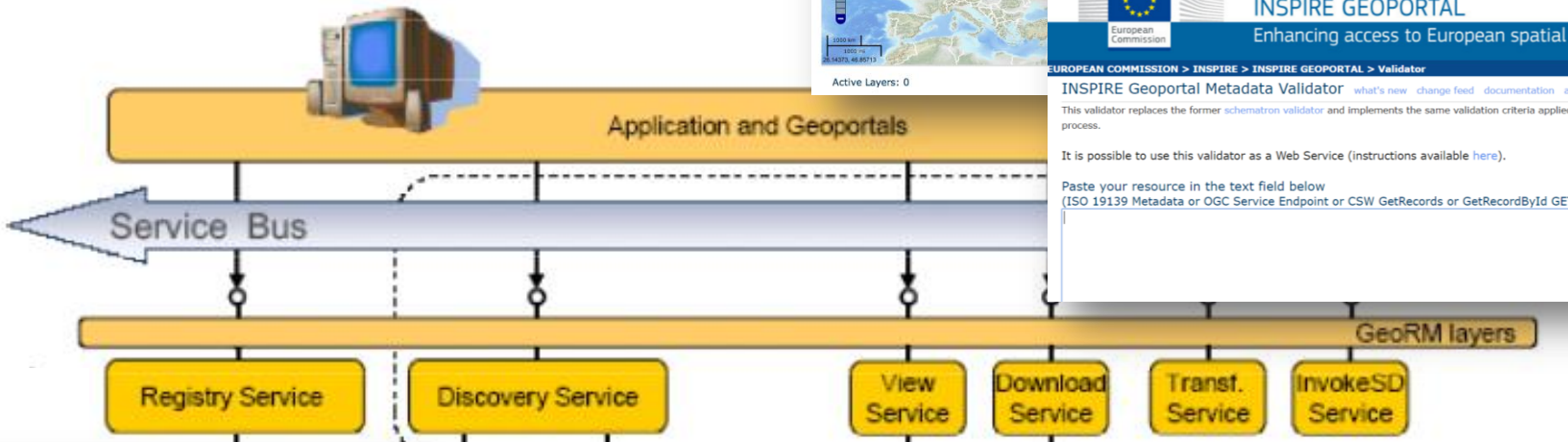
Why the MIF?



Maintain 6 legal acts and
40+ Technical Guidelines

Joint Research Centre

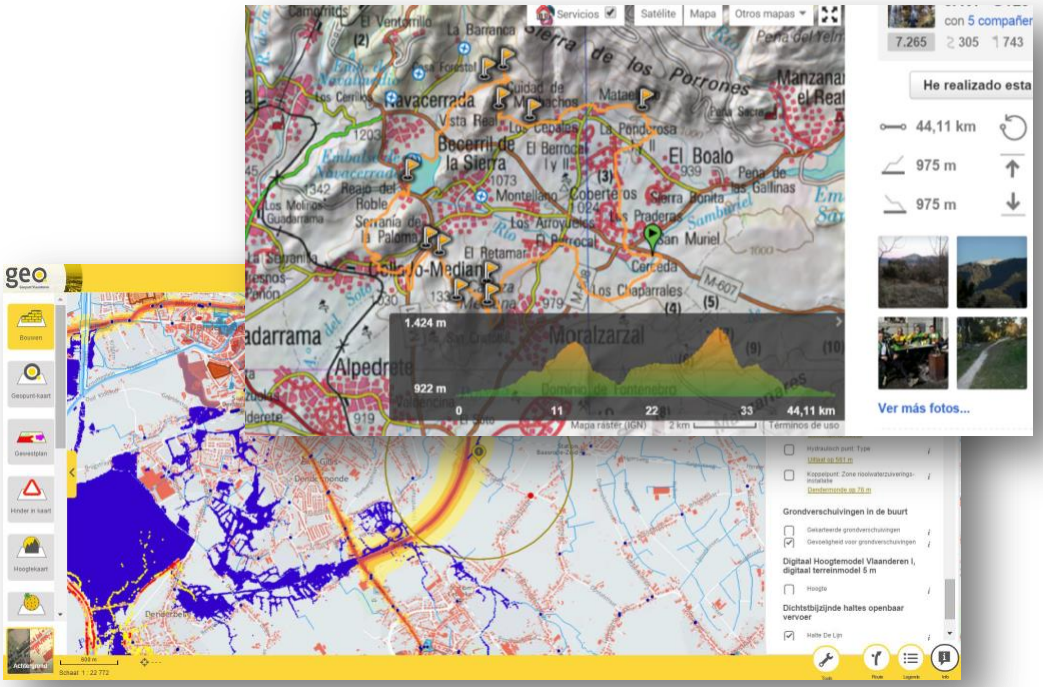
Why the MIF?



Develop and maintain central infrastructure components and tools

Joint Research Centre

Why the MIF?



INSPIRE RDF

GEO-DCAT APPLICATION PROFILE FOR EUROPEAN DATA PORTALS

Support technical evolution and use of INSPIRE data & services

Why the MIF?

INSPIRE · Infrastructure for Spatial Information in Europe

Coordinate with other policies and discuss strategic direction

Joint Research Centre

MIWP-5 Validation & conformity testing

- In the implementation phase there is a need for tools for validation (of metadata, services, data)
  - for implementers to understand where they are with their implementation & where there are gaps
  - for national coordinators for monitoring the implementation in their countries
  - for DG ENV/JRC/EEA to monitor the implementation across Europe
  - for solution providers to check their software solutions against the INSPIRE requirements
- Validation service available from JRC and in some Member States and projects
  - → duplication of effort
  - → potentially inconsistent results

MIWP-5 Validation & conformity testing

- Main goal: Development of validation rules and tools for data, metadata & network services that are
  - commonly agreed by all MS (through the MIG)
  - based on TG requirements → Abstract Test Suites (ATS)
- Actors:
  - MIWP-5 sub-group
  - Expert contracts for ATS development
  - ARE3NA contractors for ETS development and support to ATS development

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

Milestones

- Scoping workshop, May 2014
- Start ATS development, Nov 2014
- MIWP-5 kick-off meeting, Dec 2014
- Start ARE3NA activity on validation, Dec 2015
- Completion ATS development (MD+NS), June 2016
- 1st release INSPIRE testing framework and ETS: Aug 2016
- Completion ARE3NA activity on validation, June 2017

TASK 1

Sub task

1.1	*Define scope - ToR*
1.2	*Policies and procedures - Change management*
1.3	*Compliance certification*
1.4	*INSPIRE testing maintenance*

TASK 2

Sub task

2.1	*Define use cases for commonly agreed validator(s)*
2.2	*Specification of (functional and non-functional) requirements*
2.3	*Existing validation tools/ platforms and approaches*
2.4 2.5	*Design & implementation of INSPIRE testing framework*
2.6	*Collect schema & schematron existing examples - TC*

TASK 3

Sub task

3.x.1	Develop ATS (MD, SDS, NS)
3.x.2	Compare existing implementation of IR requirements
3.x.3	Map requirements in IR to requirements in TG
3.x.4	***Develop ETS based on ATS requirements***
3.5	Investigate feasibility of testing INSPIRE data sets

ATS development

- Definition: set of conformance classes that define tests for all requirements of a specification
  - Conformance class: set of conformance test modules that must be applied to receive a single certificate of conformance
  - Test module: set of related tests, all within a single conformance class
  - Test case: test for a particular requirement or a set of related requirements

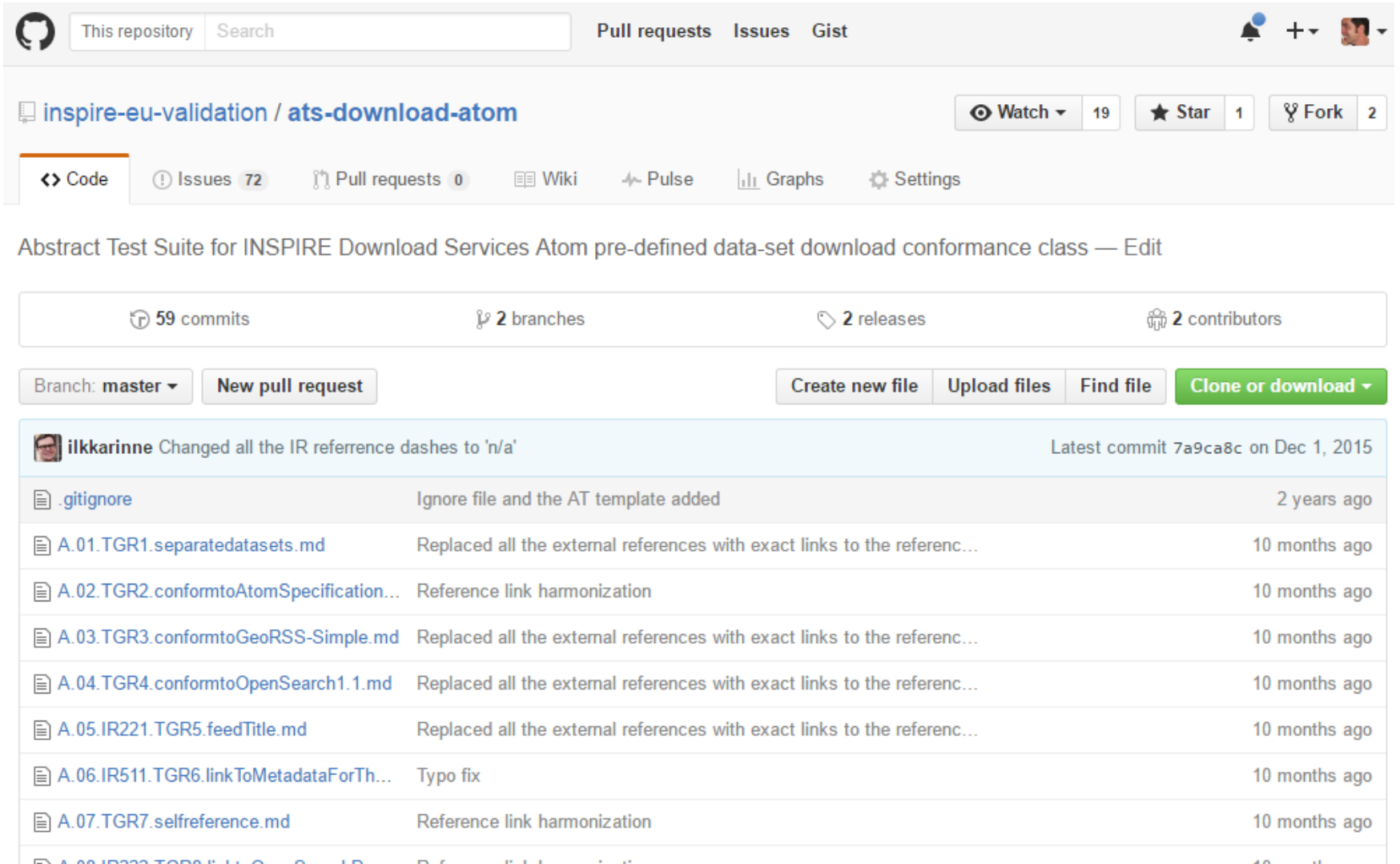
ATS + conformance classes in TGs

- ATSs included in all INSPIRE data specifications
  - Starting with Annex II+III (according to the DS common template)
  - Annex I data specifications were updated as MIWP-10
  - Part A: IR requirements (several conformance classes)
  - Part B: TG requirements (one conformance class)
- TG for download services structured in conformance (or rather: requirements) classes, but no ATS
- Other TGs do not include conformance classes or ATS

ATS development

- MWIP-5 draft ATSs
  - Initial draft: Nov 2014 – Feb 2015
  - Final draft: Sep-Nov 2015
  - Involving several expert contracts
  - In Github: https://github.com/inspire-eu-validation/
- TGs covered
  - Metadata v1.3
  - Discovery NS v3.1
  - View NS v3.11
  - Download Service (Atom, WFS Pre-defined download and Direct Access) v3.1
  - Interoperability metadata (DS v3.x)
  - Spatial data services (v3.1)

ATS development



This repository Search Pull requests Issues Gist

inspire-eu-validation / ats-download-atom

Watch 19 Star 1 Fork 2

Code Issues 72 Pull requests 0 Wiki Pulse Graphs Settings

Abstract Test Suite for INSPIRE Download Services Atom pre-defined data-set download conformance class — Edit

59 commits 2 branches 2 releases 2 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

ilkkarinne Changed all the IR referrence dashes to 'n/a' Latest commit 7a9ca8c on Dec 1, 2015

.gitignore	Ignore file and the AT template added	2 years ago
A.01.TGR1.separatedatasets.md	Replaced all the external references with exact links to the referenc...	10 months ago
A.02.TGR2.conformtoAtomSpecification...	Reference link harmonization	10 months ago
A.03.TGR3.conformtoGeoRSS-Simple.md	Replaced all the external references with exact links to the referenc...	10 months ago
A.04.TGR4.conformtoOpenSearch1.1.md	Replaced all the external references with exact links to the referenc...	10 months ago
A.05.IR221.TGR5.feedTitle.md	Replaced all the external references with exact links to the referenc...	10 months ago
A.06.IR511.TGR6.linkToMetadataForTh...	Typo fix	10 months ago
A.07.TGR7.selfreference.md	Reference link harmonization	10 months ago

ATS development

27 lines (15 sloc) | 861 Bytes Raw | Blame | History

Provide a title element

Purpose:

The "title" element of an Atom Download Service feed shall be populated with a human readable title for the feed

Test method

- the feed title must be non-empty text; the text content must include at least one alpha-numeric letter.

Reference(s):

- IR NS, M1, section 2.2.1, Download Service Metadata parameter
- TG DL, Req 5

Test type: Automated

Notes

Contextual XPath references

The namespace prefixes used as described in README.md.

Abbreviation	XPath expression
feed title	/atom:feed/atom:title

https://github.com/inspire-eu-validation/ats-download-atom/blob/master/A.05.IR221.TGR5.feedTitle.md

ATS development

- MIWP-5, ARE3NA and MIG-T review
  - Several detailed issues on proposed tests
  - Consistent terminology should be used
  - Proposed consistent structure for all ATSs
    - TG → CC → Test case
  - Review revealed issues in the TGs → 2 types of TG change requests
    - vague requirement → document the interpretation in the ATS (to be taken into account in future TG updates)
    - technical changes to the TG → reject the resolution and follow the standard TG update process through the MIG
  - Several issues related to cross-component consistency → flag issues to get a first overview
    - Need for an additional "SDI consistency" TG?

ATS development – next steps

- Develop Additional ATSs for
  - Data specification TGs (→ Clemens' presentation)
  - SDS TG v4.0
  - MD TG v2.0
- Further improvement of existing ATSs based on feedback from ETS implementation
- Discuss feedback on TGs from ATS development with the MIG-T