



MIWP Action 2.3.2

'Data-service linking simplification'

MIG-T Sub-group 2.3.2

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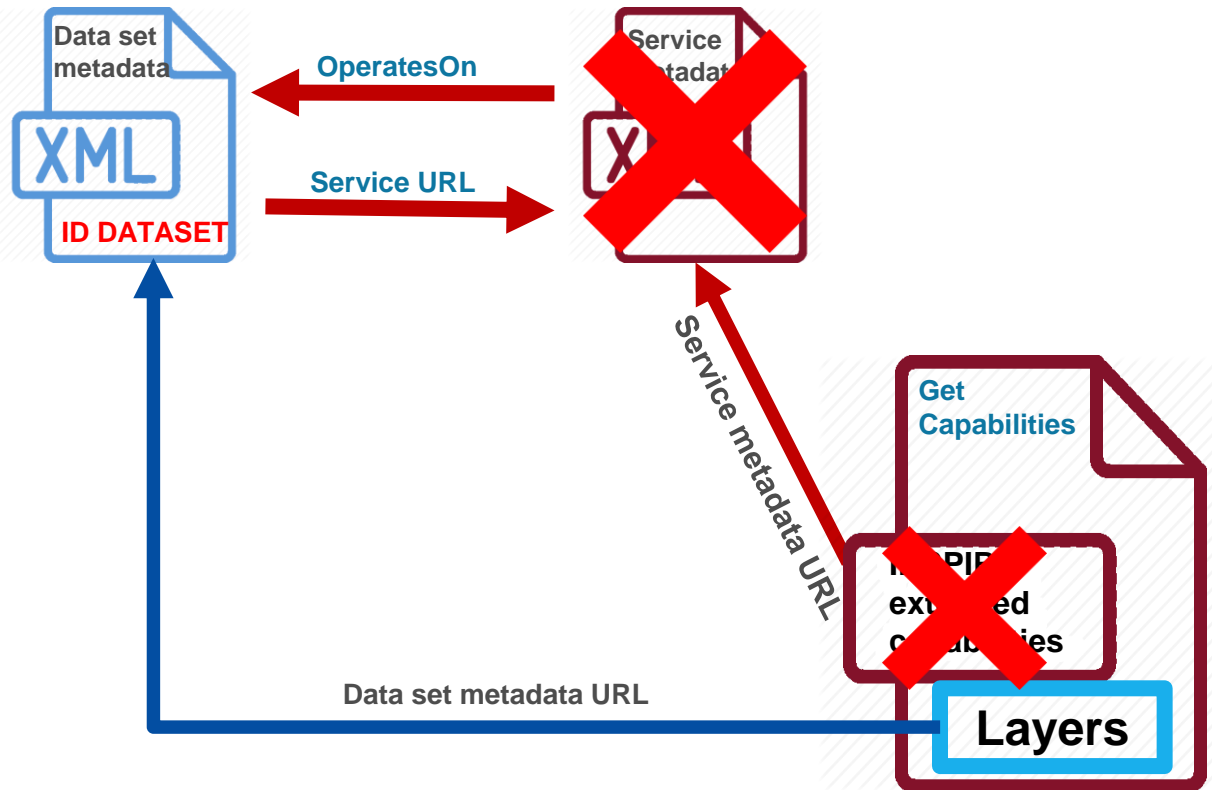
JRC INSPIRE Team

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69th MIG-T meeting – April 1st, 2022

MIWP Action 2.3.2

Data Service Linking Simplification - Overview



Part A. Data - service linking simplification
Good practice guidelines

Part B. Data - service linking simplification
Remapping of Extended Capabilities

Pending issue from Part A. Data Service Linking Simplification guidelines

Coupled resource implementation is not compliant

Issue #38

Requirement: <srv:operatesOn> element

Requirement	/req/coupled-resource-operateson-locator
A	The <code>xlink:href</code> attribute of each of the <code>srv:operatesOn</code> elements SHALL contain a <u>URL pointing to the metadata record of the provided data set or data set series, available in a Discovery Service catalog.</u>

Agreed approach

- Relax TG Requirement 3.6 by keeping the linkage to the #MD_DataIdentification section of the metadata as optional
- Add an explanatory note on this aspect in the Part A final consolidated proposal

TG Requirement 3.6: metadata/2.0/req/sds/coupled-resource

Links pointing to the online metadata descriptions of data sets provided by the described service shall be given using `srv:operatesOn` element.

The multiplicity of this element is 0..n.

This property shall be implemented by reference. The `xlink:href` attribute of each of the `srv:operatesOn` elements shall contain a URI pointing to the `gmd:MD_DataIdentification` element of the metadata record of the provided the data set or data set series.

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Part B. Remapping of Extended Capabilities

- 4 volunteer experts from 4 Member States: DK, FR, IT, NL
- Kick-off meeting: 2021-12-03
- Starting point: Part A Consolidated proposal – Annex B
- 2nd meeting: 2022-02-25
- Good discussion in the dedicated GitHub repository
- Consolidated proposal ready and agreed by Part B – team
- Few aspects to be further polished / completed.

Data Service Linking Simplification - Part B: Remapping of the Extended Capabilities

Version: draft 1.0 Date: 2022-03-21

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<https://github.com/INSPIRE-MIF/gp-data-service-linking-simplification/blob/main/proposals/Part-B-team/Consolidated-proposal-Part-B.md>

Part B. Remapping of Extended Capabilities

Aim of the work

- Define an alternative mapping of INSPIRE service metadata elements to elements available in the Capabilities document of OGC OWS standard services (WMS, WFS) and Atom feeds.
- Avoid (as an option) the need for the INSPIRE Extended Capabilities section.
- Remove remaining obstacles in the implementation of INSPIRE requirements for network services due to the extensions required to software tools available in the market.

Part B. Remapping of Extended Capabilities

Resource Type and Resource Locator

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Resource Type	inspire_common:ResourceType	WMS - WFS
Resource Type	not mapped	Atom
Resource Locator	inspire_common:ResourceLocator	WMS - WFS
Resource Locator	Feed level link in the top Atom feed /feed/link[@rel="self"]	Atom



- **Agreed new mapping**

INSPIRE metadata elements	New allocation	Applicable on Service type
Resource Type	No element mapped	WMS - WFS - Atom
Resource Locator	No element mapped	WMS - WFS - Atom

Part B. Remapping of Extended Capabilities

Spatial data service type

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Spatial Data Service Type	inspire_common:SpatialDataServiceType	WMS - WFS
Spatial Data Service Type	not mapped	Atom



- **Agreed new mapping**

INSPIRE metadata elements	New allocation	Applicable on Service type
Spatial Data Service Type	gmd:applicationProfile element (in data set metadata record)	WMS - WFS - Atom

Part B. Remapping of Extended Capabilities

Temporal reference

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Temporal Reference	inspire_common:TemporalReference	WMS - WFS
Temporal Reference	not mapped	Atom



- Agreed new mapping**

INSPIRE metadata elements	New allocation	Applicable on Service type
Temporal Reference	updateSequence attribute in the WMS_Capabilities/WFS_Capabilities root element.	WMS - WFS
Temporal Reference	feed/updated element in the Atom feed	Atom
Temporal Reference	Otherwise, gmd:citation/gmd:CI_Citation/gmd:date/gmd:CI_Date/gmd:date element in the data set metadata record, with one of the following prioritised date types:- <i>publication</i> , - <i>revision</i> or - <i>creation</i>	WMS – WFS - Atom

Part B. Remapping of Extended Capabilities

Conformity

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Conformity	inspire_common:Conformity	WMS - WFS
Conformity	not mapped	Atom

- Agreed new mapping**



INSPIRE metadata elements	New allocation	Applicable on Service type
Conformity	wms:Keyword element for each specification against the service is conformant, included within an specific wms:KeywordList group.	WMS
Conformity	ows:Keyword element for each specification against the service is conformant, included within an specific ows:Keywords group including an ows:Type element of type URI.	WFS
Conformity	atom:category element for each specification against which the service is conformant.	Atom

Part B. Remapping of Extended Capabilities

Metadata point of contact

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Metadata Point of Contact	inspire_common:MetadataPointOfContact	WMS - WFS
Metadata Point of Contact	not mapped	Atom

- Agreed new mapping**



INSPIRE metadata elements	New allocation	Applicable on Service type
Metadata Point of Contact	WMS_Capabilities/Service/ContactInformation/ContactPersonPrimary/ContactOrganization and WMS_Capabilities/Service/ContactInformation/ContactElectronicMailAddress	WMS
Metadata Point of Contact	WFS_Capabilities/ows:ServiceProvider/ows:ProviderName and WFS_Capabilities/ows:ServiceProvider/ows:ServiceContact/ows:ContactInfo/ows:Address/ows:ElectronicMailAddress	WFS
Metadata Point of Contact	<feed><author><name> and <feed><author><email>	Atom

Part B. Remapping of Extended Capabilities

Metadata date

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Metadata Date	inspire_common:MetadataDate	WMS - WFS
Metadata Date	Feed level link in the top Atom feed /feed/updated	Atom



- Agreed new mapping**

INSPIRE metadata elements	New allocation	Applicable on Service type
Metadata Date	updateSequence parameter in the WMS_Capabilities/WFS_Capabilitiesroot element.	WMS - WFS
Metadata Date	<updated> element in the Atom feed.	Atom
Metadata Date	Otherwise, gmd:citation/gmd:CI_Citation/gmd:date/gmd:CI_Date/gmd:date element in the data set metadata record, with one of the following prioritised date types: - <i>publication</i> , - <i>revision</i> or - <i>creation</i>	WMS – WFS - Atom

Part B. Remapping of Extended Capabilities

Supported languages

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Metadata Language	inspire_common:SupportedLanguages	WMS - WFS
Metadata Language	Feed level link in the top Atom feed /feed/link[@rel="self"]/@hreflang	Atom



- Agreed new mapping**

INSPIRE metadata elements	New allocation	Applicable on Service type
Metadata Language	gmd:MD_Metadata/gmd:language/gmd:LanguageCode element in the data set metadata record for default language. xml:lang attribute for supported languages	WFS - Atom

```

<ows:ServiceIdentification>
  <ows:Title xml:lang="en">My WFS</ows:Title>
  <ows:Title xml:lang="da">Min WFS</ows:Title>
  <ows:Abstract xml:lang="en">My abstract</ows:Abstract>
  <ows:Abstract xml:lang="da">Min abstrakt</ows:Abstract>
  ...
  
```

This doesn't work for WMS, it is not based on the (newer) OWS specification. In this case keep the possibility to include the (optional) ExtendedCapabilities section, including the SupportedLanguages elements

Part B. Remapping of Extended Capabilities

Unique Resource Identifier (referring to data set)

- Current mapping (in **INSPIRE NS - View/Download Service TGs**)

INSPIRE metadata elements	Elements of INSPIRE Extended Capabilities/Atom feed	Applicable on Service type
Unique Resource Identifier	<code>inspire_dls:SpatialDataSetIdentifier/inspire_common:Code</code> <code>inspire_dls:SpatialDataSetIdentifier/inspire_common:Namespace</code>	WFS
Unique Resource Identifier	<code>spatial_dataset_identifier_code</code> and <code>spatial_dataset_identifier_namespace</code>	Atom



- **Mapping proposed**

INSPIRE metadata elements	New allocation	Applicable on Service type
Unique Resource Identifier	not mapped as Unique resource identifier is not relevant for services	WMS - WFS - Atom

**TO BE FURTHER
DISCUSSED AND AGREED**

Action 2.3.2 - Next steps

Next meeting

- Complete / Finish consolidated proposal for Part B:
 - Agree on the few remaining discussions (e.g. on the remapping of Unique Resource Identifier).
 - Discuss the best approach to re-structure the affected TGs (e.g. adding a **third scenario** in NS TGs?).
 - Accordingly, propose the specific changes to TGs deemed necessary to accommodate the simplification approach into the INSPIRE framework.
- Quality checking for Action 2.3.2 consolidated proposals (Part A & Part B): Several issues to be revised, agreed and closed in GitHub.
 - Find typos.
 - Make refinements.
 - Revise consistency of changes proposed to TGs.

Action 2.3.2 - Next steps

Candidate **INSPIRE Good Practice**

- Merging Part A + Part B as a single consolidated proposal (through a dedicated pull request).
- Submission of the final (integrated) consolidated proposal as **INSPIRE Good Practice** (GP) candidate – To MIG-T: **Voting Today?**
- If endorsed as candidate, start the actions to ensure future support of the GP in the revamped INSPIRE Geoportal backend (in progress).
- Follow-up activities related to the INSPIRE GP process (Outreach, Submission for MIG endorsement, Feedback):

<https://inspire.ec.europa.eu/portfolio/good-practice-library>

Thank you!



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