



# ISO & GeoDCAT-AP pilot Updates

81<sup>st</sup> INSPIRE MIG-T, 14 February 2025

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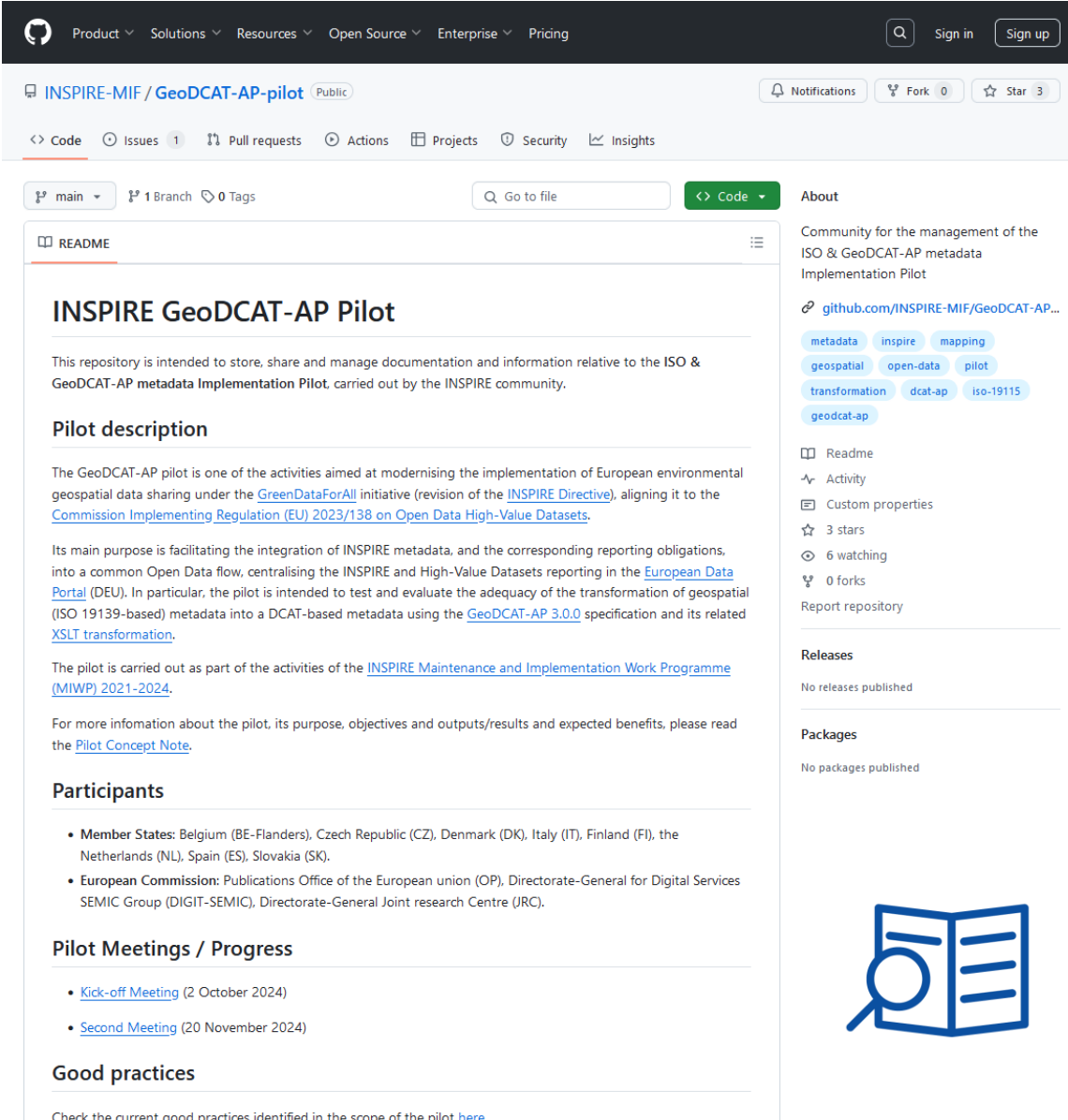
European Commission, Joint Research Centre

Joint  
Research  
Centre

# ISO & GeoDCAT-AP Pilot Collaborative activity

- Cross-community collaboration.
- Pilot meetings materials and documentation.
- Share issues and Good practices.
- GitHub repository for pilot management.

<https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/>



The screenshot displays the GitHub repository page for INSPIRE-MIF/GeoDCAT-AP-pilot. The repository is public and has 3 stars and 0 forks. The README file is selected, showing the project's purpose and description. The README content includes sections for Pilot description, Participants, Pilot Meetings / Progress, and Good practices. The Pilot description states that the repository is for documentation and information related to the ISO & GeoDCAT-AP metadata Implementation Pilot, aimed at modernising the implementation of European environmental geospatial data sharing under the GreenDataForAll initiative. The Participants section lists Member States (Belgium, Czech Republic, Denmark, Italy, Finland, Netherlands, Spain, Slovakia) and the European Commission. The Pilot Meetings / Progress section lists a Kick-off Meeting (2 October 2024) and a Second Meeting (20 November 2024). The Good practices section mentions checking current good practices identified in the scope of the pilot.

INSPIRE-MIF / GeoDCAT-AP-pilot (Public)

Code Issues 1 Pull requests Actions Projects Security Insights

main 1 Branch 0 Tags

Go to file

Code

**INSPIRE GeoDCAT-AP Pilot**

This repository is intended to store, share and manage documentation and information relative to the ISO & GeoDCAT-AP metadata Implementation Pilot, carried out by the INSPIRE community.

**Pilot description**

The GeoDCAT-AP pilot is one of the activities aimed at modernising the implementation of European environmental geospatial data sharing under the [GreenDataForAll](#) initiative (revision of the [INSPIRE Directive](#)), aligning it to the [Commission Implementing Regulation \(EU\) 2023/138 on Open Data High-Value Datasets](#).

Its main purpose is facilitating the integration of INSPIRE metadata, and the corresponding reporting obligations, into a common Open Data flow, centralising the INSPIRE and High-Value Datasets reporting in the [European Data Portal](#) (DEU). In particular, the pilot is intended to test and evaluate the adequacy of the transformation of geospatial (ISO 19139-based) metadata into a DCAT-based metadata using the [GeoDCAT-AP 3.0.0](#) specification and its related [XSLT transformation](#).

The pilot is carried out as part of the activities of the [INSPIRE Maintenance and Implementation Work Programme \(MIWP\) 2021-2024](#).

For more information about the pilot, its purpose, objectives and outputs/results and expected benefits, please read the [Pilot Concept Note](#).

**Participants**

- **Member States:** Belgium (BE-Flanders), Czech Republic (CZ), Denmark (DK), Italy (IT), Finland (FI), the Netherlands (NL), Spain (ES), Slovakia (SK).
- **European Commission:** Publications Office of the European union (OP), Directorate-General for Digital Services SEMIC Group (DIGIT-SEMIC), Directorate-General Joint research Centre (JRC).

**Pilot Meetings / Progress**

- [Kick-off Meeting](#) (2 October 2024)
- [Second Meeting](#) (20 November 2024)

**Good practices**

Check the current good practices identified in the scope of the pilot [here](#).

Community for the management of the ISO & GeoDCAT-AP metadata Implementation Pilot

[github.com/INSPIRE-MIF/GeoDCAT-AP...](#)

metadata inspire mapping geospatial open-data pilot transformation dcat-ap iso-19115 geodcat-ap

Readme Activity Custom properties 3 stars 6 watching 0 forks Report repository

**Releases**

No releases published

**Packages**

No packages published



# ISO & GeoDCAT-AP Pilot Participants



- **Member States**

Contact points for the national geospatial catalogues, as **users of GeoDCAT-AP** to **transform geospatial metadata**.

- Participants:



BE – Flanders,



CZ,



DK,



IT



FI,



NL,



ES,



SK,



FR

- **Experts from the ‘DCAT-AP schema plug-in integration in GeoNetwork’ WG.**
- **Publications Office of the European Union (OP) / European Data Portal ([data.europa.eu](https://data.europa.eu))**  
**Future receptor of GeoDCAT-AP metadata and transformation re-user.**
- **DG DIGIT SEMIC group**  
Point of contact for **resolving and contributing to solutions** in case potential issues.
- **DG JRC**  
**Organiser** of the pilot, and provider of **scientific & policy knowledge**.



# Overview

## Latest Meeting – 3<sup>rd</sup> Meeting (23-01-2025)



### Objectives

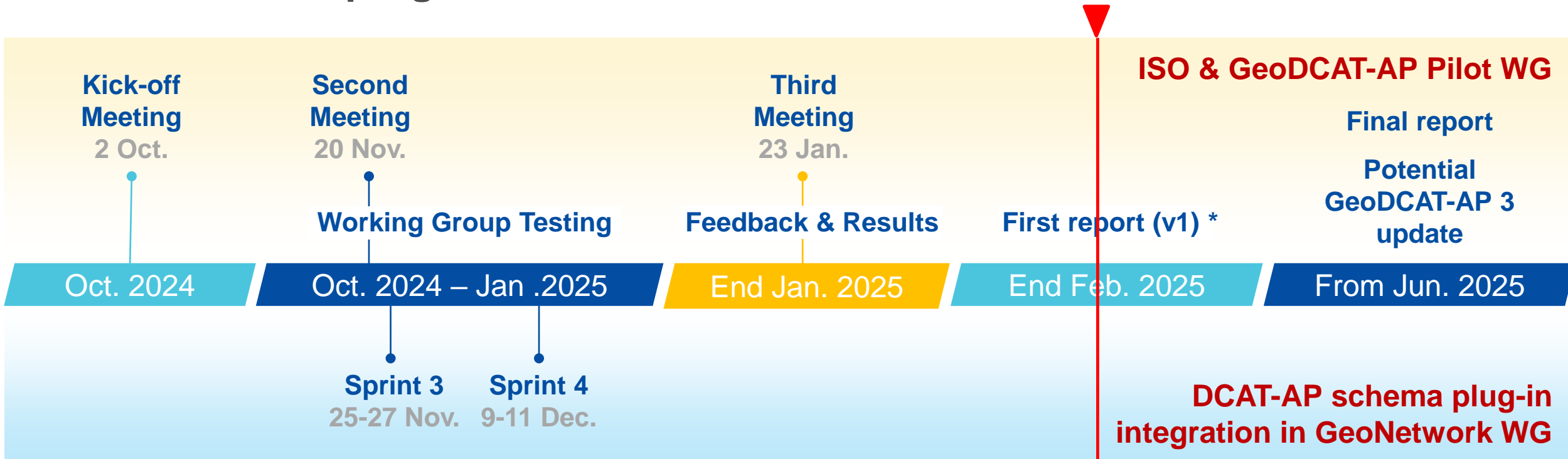
- Provide an overview of the Pilot status and ongoing activities.
- Clarify and refine the High-Value Datasets tagging good practice candidate.
- Share Pilot progress reports between participants (BE-Flanders, CZ, DK, FR, IT, FI, NL, ES, SK, OP, JRC)
- Discussions:
  - Agreement on an updated Timeline.
  - High-Value Datasets tagging good practice candidate.
  - Analysis, classification and potential integration of issues (for next meeting)
- Inform about the work on the DCAT-AP schema plugin for GeoNetwork, and call for testing (BE-Flanders organising).

# ISO & GeoDCAT-AP Pilot

## Updated timeline



- Work in progress



- Work is ongoing. Participants published their initial results on GitHub.
- Need to collaboratively analyse the outcomes. Potential integration.
- A First report will be delivered by March 2025.

# High-Value Datasets tagging Candidate good practice

## State of play



### GeoDCAT-AP 3.0.0 release for public review

Dear Community Member,

We are thrilled to announce that the GeoDCAT Application Profile 3.0.0 for geospatial portals in Europe is entering its public review (GeoDCAT-AP 3.0.0). This release for public review is the result of fruitful collaboration between [JRC](#), [DG ENV](#), SEMIC and the many contributors that participated during the [webinars](#) and on [GitHub](#) to align GeoDCAT-AP with DCAT-AP 3.0.0.

GeoDCAT-AP is an extension of DCAT-AP for describing elements defined in the core profile of ISO 19115:2003 and

Its basic use case is to make spatial datasets, data series borders and sectors. This can be achieved by the exchange

[GeoDCAT-AP 3.0.0](#) will be the latest version of the GeoDCAT-AP

```
CANDIDATE-ISO_HVD_Tagging_Anchor_Multilingual.xml CANDIDATE-ISO_HVD_Tagging_Anchor_Non-Multilingual.xml
1 <!-- Multilingual ISO records -->
2 <gmd:MD_Metadata xmlns:gmd="http://www.isotc211.org/2005/gmd">
3   ...
4   <gmd:language>
5     <gmd:LanguageCode codeListValue="eng">English</gmd:LanguageCode>
6   </gmd:language>
7   ...
8   <gmd:locale>
9     <gmd:PT_Locale id="nl">
10       <gmd:LanguageCode>
11         <gmd:LanguageCode codeListValue="dut">Dutch</gmd:LanguageCode>
12       </gmd:LanguageCode>
13     </gmd:PT_Locale>
14   </gmd:locale>
15   ...
16   <!-- HVD Free Keyword Section -->
17   <gmd:descriptiveKeywords>
18     <gmd:MD_Keywords xsi:type="gmd:PT_FreeText_PropertyType">
19       <!-- HVD Keyword -->
20       <gmd:keyword>
21         <gmx:Anchor xlink:href="http://data.europa.eu/eli/reg_impl/2023/138/oj">High-value dataset</gmx:Anchor>
22         <gmd:PT_FreeText>
23           <gmd:textGroup>
24             <gmd:LocalisedCharacterString locale="#nl">High-value dataset</gmd:LocalisedCharacterString>
25           </gmd:textGroup>
26         </gmd:PT_FreeText>
27       </gmd:keyword>
28     </gmd:MD_Keywords>
29   </gmd:descriptiveKeywords>
30 </gmd:MD_Metadata>
```

The screenshot shows the GitHub repository page for "INSPIRE-MIF / GeoDCAT-AP-pilot". The repository is public and has 7 issues, 0 pull requests, 0 actions, 0 projects, 0 security issues, and 0 insights. The main branch is "main" with 1 branch and 0 tags. The repository has 86 commits and 65 contributors. The file list shows: "good-practices" (Delete good-practices/hvd-tagging/CANDIDATE-ISO\_... 3 weeks ago), "meetings" (Update readme.md 3 weeks ago), "20241119\_GeoDCAT-AP-Pilot-Concept\_No..." (Add files via upload 3 months ago), and "README.md" (Update README.md 6 minutes ago). The README section is titled "INSPIRE GeoDCAT-AP Pilot" and contains the following text: "This repository is intended to store, share and manage documentation and information relative to the ISO & GeoDCAT-AP metadata Implementation Pilot, carried out by the INSPIRE community." The "Pilot description" section states: "The GeoDCAT-AP pilot is one of the activities aimed at modernising the implementation of European environmental geospatial data sharing under the [GreenDataForAll](#) initiative (revision of the [INSPIRE Directive](#)), aligning it to the [Commission Implementing Regulation \(EU\) 2023/138 on Open Data High-Value Datasets](#)." It also mentions: "Its main purpose is facilitating the integration of INSPIRE metadata, and the corresponding reporting obligations, into a common Open Data flow, centralising the INSPIRE and High-Value Datasets reporting in the [European Data Portal](#) (DEU). In particular, the pilot is intended to test and evaluate the adequacy of the transformation of geospatial (ISO 19139-based) metadata into a DCAT-based metadata using the [GeoDCAT-AP 3.0.0](#) specification and its related [XSLT transformation](#)." The final paragraph states: "The pilot is carried out as part of the activities of the [INSPIRE Maintenance and Implementation Work Programme \(MIWP\) 2021-2024](#)." and "For more information about the pilot, its purpose, objectives and outputs/results and expected benefits, please read the [Pilot Concept Note](#)."

# High-Value Datasets tagging

## Candidate good practice



### Input examples identified

25-27 Nov. & 09-11 Dec. 2024

- Approaches:
  - Keyword-based: BE-Flanders, DE, DK, NL
  - Data Quality report-based: ES
- Encoding: mixes of 'gmx:Anchor' vs. 'gco:CharacterString'

### Agreed decisions

- Approach:
  - Keyword-based (most commonly used)
- Scope – Tagging of:
  - Referencing the High-value dataset keyword using the applicable legislation - **Mandatory**
  - Thesaurus-based keyword for HVD Category
  - Thesaurus-based keyword for HVD Sub-Category
- Encoding: Use 'gmx:Anchor' encoding + Allow use of ISO multi-lingual structure

**Mandatory:** Provide either the Category OR the Subcategory  
**Optional:** Provide the other one



# High-Value Datasets tagging

## Candidate good practice



### Good practice candidate

‘DCAT-AP schema plug-in integration in GeoNetwork & Testing Pilot GeoDCAT-AP’ WG

HVD ISO Elements:

- Free keyword for Identification:
  - Link the EU applicable legislation using the ‘High-value dataset’ (or ‘HVD’) tag
- Thesaurus-Based Keyword(s) for HVD Categorization:
  - Category
  - Subcategory
  - Thesaurus Reference

### Final candidate agreement

- **Sprint 4** (09-11 Dec. 2024)

### Shared for potential endorsement

- **80<sup>th</sup> MIG-T** (13 Dec. 2024)

<https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/tree/main/good-practices/hvd-tagging>

[https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/blob/main/good-practices/hvd-tagging/CANDIDATE-ISO\\_HVD\\_Tagging\\_Anchor\\_Non-Multilingual-clarification.xml](https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/blob/main/good-practices/hvd-tagging/CANDIDATE-ISO_HVD_Tagging_Anchor_Non-Multilingual-clarification.xml)

[https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/blob/main/good-practices/hvd-tagging/CANDIDATE-ISO\\_HVD\\_Tagging\\_Anchor\\_Multilingual-clarification.xml](https://github.com/INSPIRE-MIF/GeoDCAT-AP-pilot/blob/main/good-practices/hvd-tagging/CANDIDATE-ISO_HVD_Tagging_Anchor_Multilingual-clarification.xml)

**ISO Multilingual  
& Non-multilingual  
options**



# High-Value Datasets tagging

## Candidate good practice



### HVD Free Keyword

#### Purpose:

- To classify the dataset as a High-Value Dataset (HVD) and link it to the EU applicable legislation.

#### Key Elements:

- Keyword: **Recommended use of the tag in English**
  - <gmd:keyword> contains:  
"High-value dataset" or "HVD"
- Anchor with Reference URL: **Mandatory** – Anchor encoding and reference to the applicable legislation (URL)
  - <gmx: Anchor xlink:href="[http://data.europa.eu/eli/reg\\_impl/2023/138/oj](http://data.europa.eu/eli/reg_impl/2023/138/oj)">  
Links to the EU Implementing Regulation on High-value datasets.

#### Benefits:

- Ensures compliance with EU regulations.
- Provides semantic interpretation for metadata.

#### NOTE:

The HVD denotation is not a keyword published in a thesaurus, it is a reference to the legislation.

# High-Value Datasets tagging

## Candidate good practice



### HVD Free Keyword – Examples

**Mandatory**

**Recommended**

```
...
<!-- HVD Free Keyword Section -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords>
    <!-- HVD Keyword -->
    <!-- Mandatory - Anchor encoding and reference to the applicable legislation (URL) / Recommended use of the
    tag 'High-value dataset' or 'HVD' in English -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/eli/reg_impl/2023/138/oj">High-value dataset</gmx:Anchor>
    </gmd:keyword>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
...
```

```
...
<!-- HVD Free Keyword Section -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords>
    <!-- HVD Keyword -->
    <!-- Mandatory - Anchor encoding and reference to the applicable legislation (URL) / Recommended use of the
    tag 'High-value dataset' or 'HVD' in English -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/eli/reg_impl/2023/138/oj">HVD</gmx:Anchor>
    </gmd:keyword>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
...
```

# High-Value Datasets tagging

## Candidate good practice



### HVD Thesaurus-Based Keywords – 1

Purpose:

- To provide a structured classification of the dataset using a controlled vocabulary (thesaurus).

Keywords:

**Mandatory:** Provide either the Category OR the Subcategory

**Optional:** Provide the other one

- **Category:**
  - <gmd:keyword> contains e.g.: **Recommended use of the tag in the main language of the metadata**
    - "Earth observation and environment"
  - Reference: **Mandatory (if Category is provided)** – Anchor encoding and the thesaurus value URL
    - [http://data.europa.eu/bna/c\\_dd313021](http://data.europa.eu/bna/c_dd313021)
- **Subcategory:**
  - <gmd:keyword> contains e.g.: **Recommended use of the tag in the main language of the metadata**
    - "Sea regions"
  - Reference: **Mandatory (if Subcategory is provided)** – Anchor encoding and the thesaurus value URL
    - [http://data.europa.eu/bna/c\\_f399050e](http://data.europa.eu/bna/c_f399050e)

# High-Value Datasets tagging

## Candidate good practice



### HVD Thesaurus-Based Keywords – 2

#### Thesaurus Reference:

- <gmd:thesaurusName> provides metadata for the controlled vocabulary.

#### Details:

- Thesaurus Title:
    - <gmx:Anchor>: <http://data.europa.eu/bna/asd487ae75>
    - "High-value dataset categories"
  - Publication Date:
    - <gco:Date>: **2023-09-27**
  - Date Type:
    - <gmd:CI\_DateTypeCode>: publication
- **Mandatory** – Anchor encoding and thesaurus URL
  - **Recommended use of the tag in English** (even in multilingual metadata)
  - **Recommended date value, date type 'publication'**
  - **Note: the date value has been corrected**

#### Benefits:

- Ensures precise categorization and link to the thesaurus.
- Supports semantic interoperability with EU HVD standards.

#### **NOTE:**

There are currently no translations of the name of the High-value dataset categories thesaurus.

# High-Value Datasets tagging

## Candidate good practice



### HVD Thesaurus-Based Keywords – Example

Mandatory

Recommended

```
<!-- HVD Thesaurus-Based Keywords Section -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords>
    <!-- Mandatory: Provide either the HVD Category OR the HVD Subcategory -->
    <!-- Optional: Provide the other one -->

    <!-- HVD Category Keyword -->
    <!-- Mandatory (if Category is provided) - Anchor encoding and the thesaurus value URL / Recommended use of the tag in the main language of the metadata -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/bna/c_dd313021">Earth observation and environment</gmx:Anchor>
    </gmd:keyword>
    <!-- HVD Subcategory Keyword -->
    <!-- Mandatory (if Subcategory is provided) - Anchor encoding and the thesaurus value URL / Recommended use of the tag in the main language of the metadata -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/bna/c_f399050e">Sea regions</gmx:Anchor>
    </gmd:keyword>
    <!-- Thesaurus Reference -->
    <gmd:thesaurusName>
      <gmd:CI_Citation>
        <!-- Mandatory Anchor encoding and thesaurus URL / Recommended use of the Thesaurus name in English -->
        <gmd:title>
          <gmx:Anchor xlink:href="http://data.europa.eu/bna/asd487ae75">High-value dataset categories</gmx:Anchor>
        </gmd:title>
        <gmd:date>
          <gmd:CI_Date>
            <gmd:date>
              <gco>Date>2023-09-27</gco>Date>
            </gmd:date>
            <gmd:dateType>
              <gmd:CI_DateTypeCode codeList=
                "http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/ML_gmxCodeLists.xml#CI_DateTypeCode"
                codeListValue="publication"/>
            </gmd:dateType>
          </gmd:CI_Date>
        </gmd:date>
      </gmd:CI_Citation>
    </gmd:thesaurusName>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
```



European  
Commission

# High-Value Datasets tagging

## Candidate good practice



### HVD Free Keyword – Multilingual Example

```
...
<gmd:language>
  <gmd:LanguageCode codeListValue="eng">English</gmd:LanguageCode>
</gmd:language>
...
<gmd:locale>
  <gmd:PT_Locale id="nl">
    <gmd:languageCode>
      <gmd:LanguageCode codeListValue="dut"/>
    </gmd:languageCode>
  </gmd:PT_Locale>
</gmd:locale>
...

<!-- HVD Free Keyword Section -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords xsi:type="gmd:PT_FreeText_PropertyType">
    <!-- HVD Keyword -->
    <!-- Mandatory - Anchor encoding and reference to the applicable legislation (URL) / Recommended use of the tag
    'High-value dataset' or 'HVD' in English -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/eli/reg_impl/2023/138/oj">High-value dataset</gmx:Anchor>
      <gmd:PT_FreeText>
        <gmd:textGroup>
          <gmd:LocalisedCharacterString locale="#nl">High-value dataset</gmd:LocalisedCharacterString>
        </gmd:textGroup>
      </gmd:PT_FreeText>
    </gmd:keyword>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
```

Mandatory

Recommended



# High-Value Datasets tagging

## Candidate good practice



### HVD Thesaurus-Based Keywords – Multilingual Example

```
<!-- HVD Thesaurus-Based Keywords Section -->
<gmd:descriptiveKeywords>
  <gmd:MD_Keywords>
    <!-- Mandatory: Provide either the HVD Category OR the HVD Subcategory -->
    <!-- Optional: Provide the other one -->

    <!-- HVD Category Keyword -->
    <!-- Mandatory (if Category is provided) - Anchor encoding and the thesaurus value URL / Recommended use of the tag in the main language of the metadata -->
    <gmd:keyword xsi:type="gmd:PT_FreeText_PropertyType">
      <gmx:Anchor xlink:href="http://data.europa.eu/bna/c dd313021">Earth observation and environment</gmx:Anchor>
      <gmd:PT_FreeText>
        <gmd:textGroup>
          <gmd:LocalisedCharacterString locale="#nl">Aardobservatie en milieu</gmd:LocalisedCharacterString>
        </gmd:textGroup>
      </gmd:PT_FreeText>
    </gmd:keyword>

    <!-- HVD Subcategory Keyword -->
    <!-- Mandatory (if Subcategory is provided) - Anchor encoding and the thesaurus value URL / Recommended use of the tag in the main language of the metadata -->
    <gmd:keyword>
      <gmx:Anchor xlink:href="http://data.europa.eu/bna/c f399050e">Sea regions</gmx:Anchor>
      <gmd:PT_FreeText>
        <gmd:textGroup>
          <gmd:LocalisedCharacterString locale="#nl">Zeegebieden</gmd:LocalisedCharacterString>
        </gmd:textGroup>
      </gmd:PT_FreeText>
    </gmd:keyword>

    <!-- Thesaurus Reference -->
    <gmd:thesaurusName>
      <gmd:CI_Citation>
        <gmd:title xsi:type="gmd:PT_FreeText_PropertyType">
          <!-- Mandatory Anchor encoding and thesaurus URL / Recommended use of the Thesaurus name in English (even if multi-lingual metadata - Reason: No translations of this name are available) -->
          <gmx:Anchor xlink:href="http://data.europa.eu/bna/asd487ae75">High-value dataset categories</gmx:Anchor>
          <gmd:PT_FreeText>
            <gmd:textGroup>
              <gmd:LocalisedCharacterString locale="#nl">High-value dataset categorieën</gmd:LocalisedCharacterString>
            </gmd:textGroup>
          </gmd:PT_FreeText>
        </gmd:title>
        <gmd:date>
          <gmd:CI_Date>
            <gmd:date>
              <gco:Date>2023-09-27</gco:Date>
            </gmd:date>
            <gmd:dateType>
              <gmd:CI_DateTypeCode codeList=
                "http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/ML_gmxCodeLists.xml#CI_DateTypeCode"
                codeListValue="publication"/>
            </gmd:dateType>
          </gmd:CI_Date>
        </gmd:date>
      </gmd:CI_Citation>
    </gmd:thesaurusName>
  </gmd:MD_Keywords>
</gmd:descriptiveKeywords>
```

Mandatory

Recommended

# High-Value Datasets tagging

## Candidate good practice

- **Voting status by INSPIRE MIG-T**

Currently under vote for potential endorsement.

- Initiated on 19 Dec. 2024.
- 13 Member States / countries voted: BE, HR, CY, CZ, EE, FI, IE, IT, NL, NO, RO, SK, ES.
- Received so far: **12 positive votes / 1 vote against** endorsement.

- **Voting procedure**

**To be further extended**, at least until **28 February 2025**.

- **Vote here!**

[https://ec.europa.eu/consultation/runner/INSPIRE\\_hvd\\_Tagging](https://ec.europa.eu/consultation/runner/INSPIRE_hvd_Tagging)



# ISO & GeoDCAT-AP Pilot

## Next steps



### Main objectives

- Provide a first draft of the Pilot report, including the outcomes gathered from all progress reports delivered by participants.
- Analyse the issues (recently) posted on GitHub. Analyse their commonalities and classify them.
- Promote discussion in the next pilot meeting, for a joint reporting to SEMIC.

### When?

- **4<sup>th</sup> Meeting to be scheduled by beginning of March 2025**
- A pool will be sent soon.

# Thank you

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