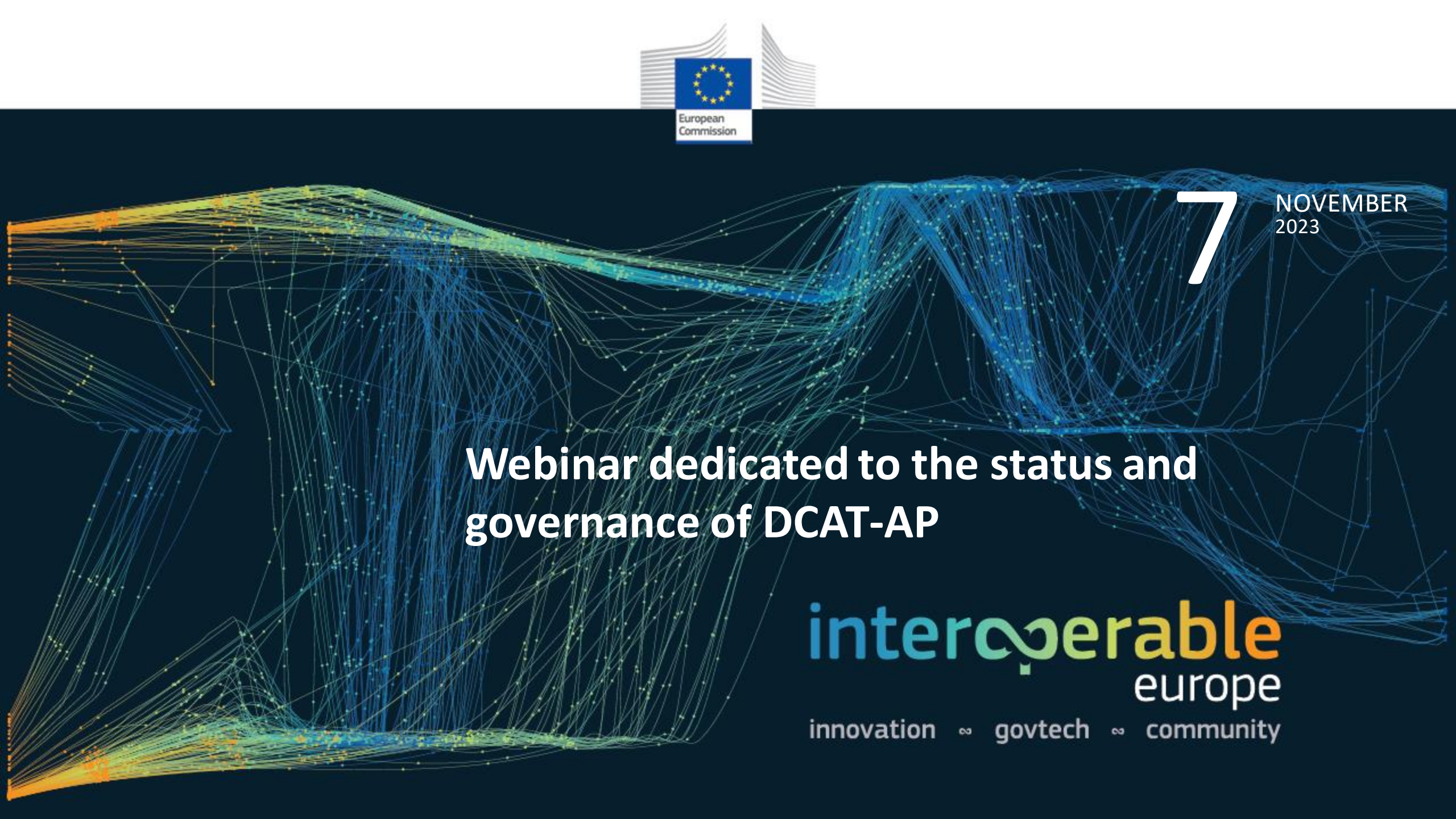

European Commission
7
NOVEMBER
2023
Webinar dedicated to the status and governance of DCAT-AP
interoperable
europe
innovation ∞ govtech ∞ community

Agenda

01 **Welcome**

02 **Resolutions on DCAT-AP HVD issues**

03 **Upcoming & ongoing activities within the DCAT-AP ecosystem**

04 **DCAT-AP 3.0 feedback and related resolutions**

05 **Wrap up and next steps**

Workshop practicalities

Audio

Click on ‘connect audio’ but please mute your microphones

Chat

You can also share your questions for the Q&A session via the chat

Recording

The workshop will be recorded

Context of the SEMIC assets

Introduction to SEMIC

The objectives of the SEMIC action is to promote Semantic Interoperability amongst the EU Member States by:

- Promoting, share and reuse of semantic assets, experience and tools and facilitating agreements in key areas.
- Identifying opportunities for alignment on semantic definitions, metadata and reference data sources with special focus on identification and definitions of Core Concepts / Vocabularies.
- Raising awareness on the importance of data and metadata management.

Current SEMIC assets

Vocabularies

CORE PERSON VOCABULARY

A person's name(s), date and place of birth/death, identifier, addresses, citizenship, etc.

CORE BUSINESS VOCABULARY

The legal name, address, identifier, company type, and activities of a legal entity.

CORE LOCATION VOCABULARY

The different ways of describing a location, e.g. via an address, a geographic name, or a geometry, in alignment with INSPIRE.

CORE CRITERION & EVIDENCE VOCABULARY

The requirements and evidence of a procedure or formal process.

CORE PUBLIC ORGANISATION VOCABULARY

The administrative information, hierarchy, identifiers, events and classification of a public organisation.

CORE PUBLIC EVENT VOCABULARY

A public event, its time, audience, location, etc.

Application Profiles

CORE PUBLIC SERVICE VOCABULARY Application Profile

DCAT-AP FOR DATA PORTALS IN EUROPE

BRegDCAT-AP FOR BASE REGISTRIES

GeoDCAT-AP FOR GEOSPATIAL DATASETS

StatDCAT-AP FOR STATISTICAL DATASETS

ADMS ASSET DESCRIPTION METADATA SCHEMA

Timeline DCAT-AP 3.0 and DCAT-AP HVD

DCAT-AP
FOR
DATA PORTALS
IN EUROPE

Timeline webinars

DCAT-AP
FOR
DATA PORTALS
IN EUROPE

Objective of the webinar series

Today's webinar

Discussing the feedback received and proposed resolutions regarding:

- DCAT-AP HVD

A status update and overview for

- DCAT-AP 3.0
- DCAT-AP extensions
- DCAT-AP ecosystem

Webinar on the 21st of November

Resolving the technical issues for DCAT-AP 3.0

- Cross-concern topics (Guidelines for building DCAT-AP profiles, profiling themes and other properties, …)
- Detailed topics (ContactPoint, Agent Types, Change Type, Cardinality conformsTo CatalogueRecord, …)
- 3.0 Alignment topics (Dataset Series, inverse properties, catalogue composition, etc.)

Issues related to DCAT-AP HVD

Overview of the public review

- **Review period** lasted from 18 July 2023 until 30 September 2023
- **102 Issues in total**
- Objective is to address approximately 80+ issues with release of DCAT-AP, DCAT-AP for HVD

Big thanks to the community for all the input!

Overview of the DCAT-AP for HVD release issues

Review period from 18 July 2023 until 30 September 2023

on document **https://semiceu.github.io/DCAT-AP/releases/2.2.0-hvd/**

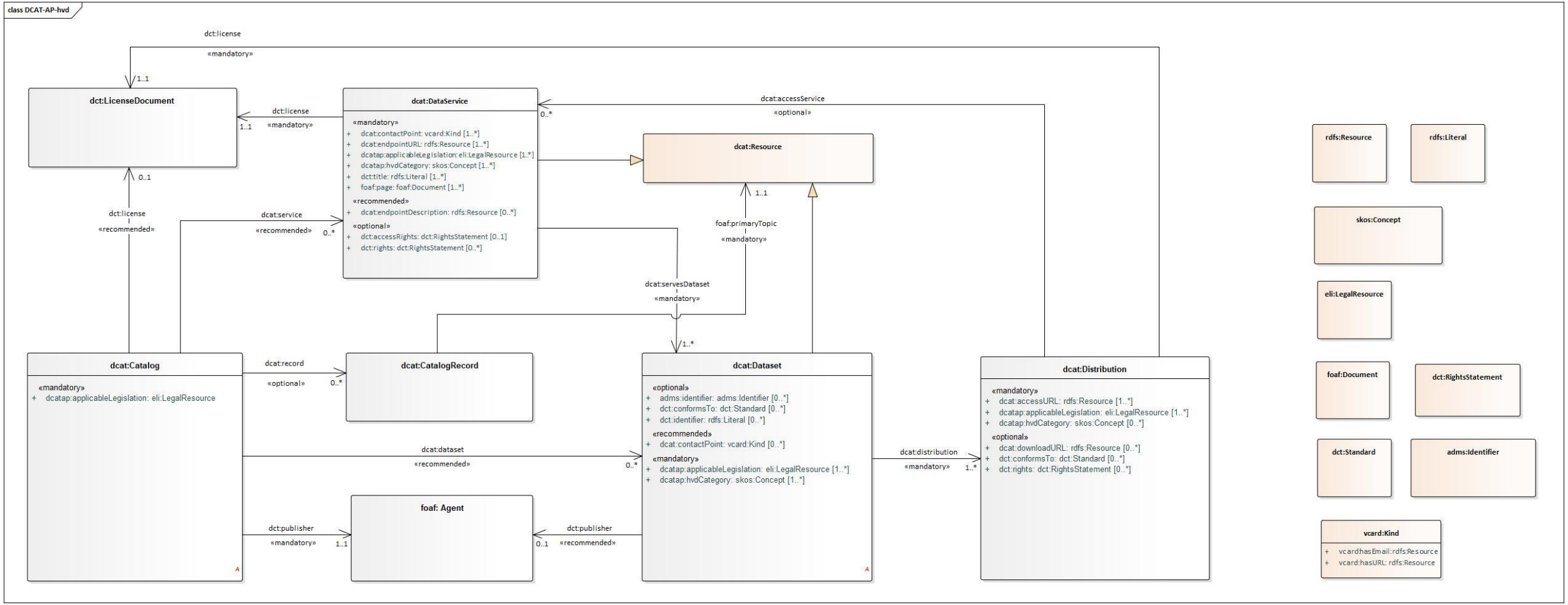
25 Issues in total tagged with label HVD

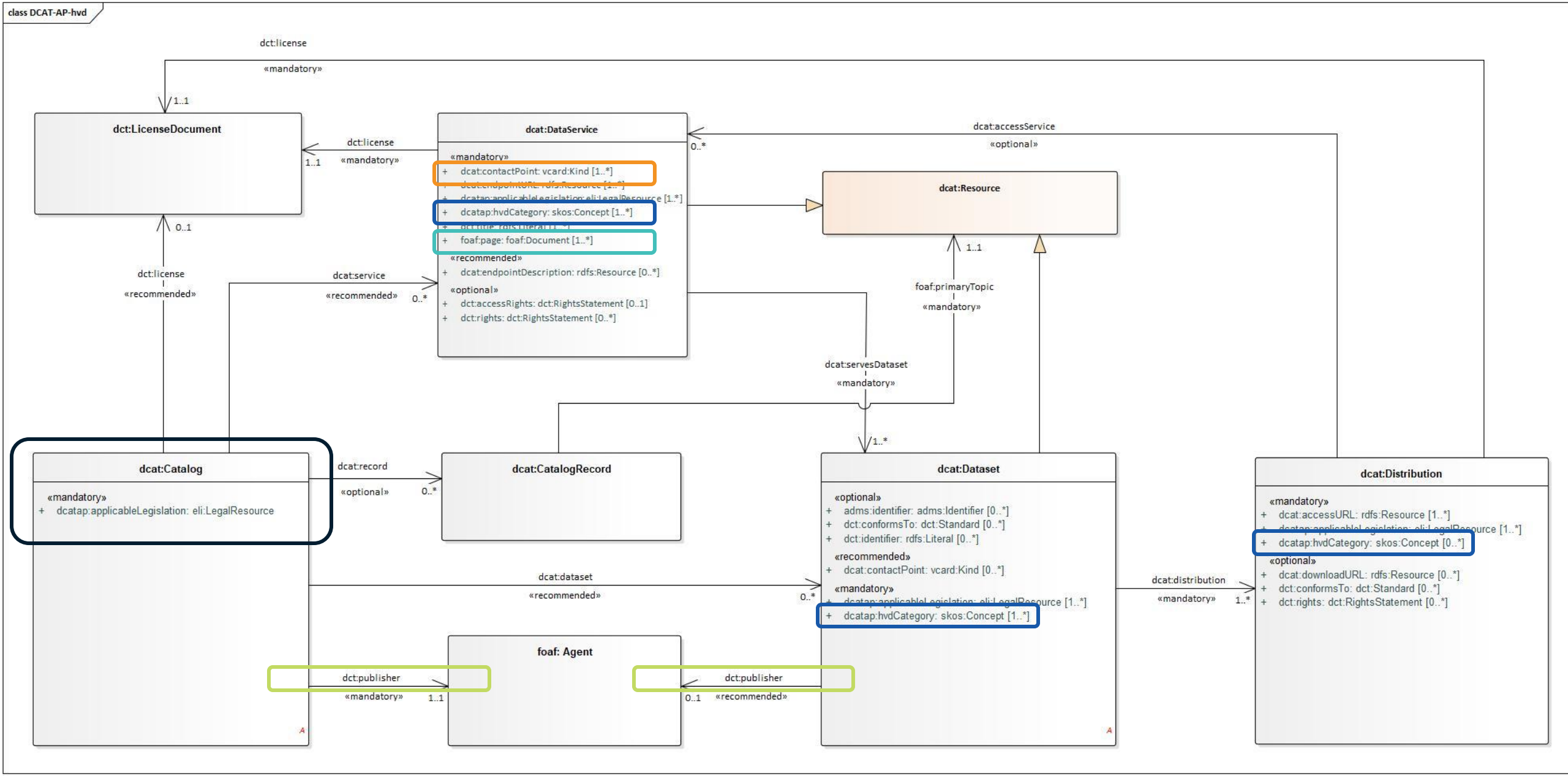
- 19 were for information or textual bug fixes
- 6 contained suggestions with minor impact

- **2 editorial next steps** connected with questions to be discussed in the webinar of **21 November 2023**

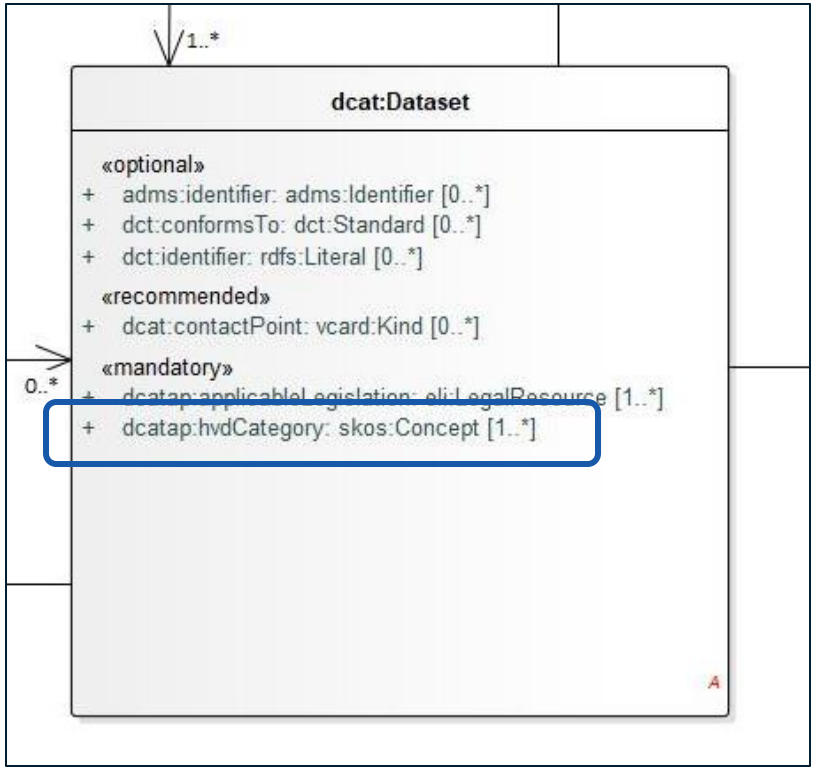
Properties & clarifications

DCAT-AP for HVD




class DCAT-AP-hvd
dct:license
«mandatory»
1..1
dct:LicenseDocument
dct:license
«mandatory»
1..1
dcat:DataService
«mandatory»
+ dcat:contactPoint: vcard:Kind [1..*]
+ dcatap:hvdCategory: skos:Concept [1..*]
+ foaf:page: foaf:Document [1..*]
«recommended»
+ dcat:endpointDescription: rdfs:Resource [0..*]
«optional»
+ dct:accessRights: dct:RightsStatement [0..1]
+ dct:rights: dct:RightsStatement [0..*]
dcat:accessService
«optional»
0..*
dcat:Resource
1..1
foaf:primaryTopic
«mandatory»
0..1
dct:license
«recommended»
dcat:service
«recommended»
0..*
dcat:servesDataset
«mandatory»
1..*
dcat:Catalog
«mandatory»
+ dcatap:applicableLegislation: eli:LegalResource
dcat:record
«optional»
0..*
dcat:CatalogRecord
dcat:Dataset
«optional»
+ adms:identifier: adms:Identifier [0..*]
+ dct:conformsTo: dct:Standard [0..*]
+ dct:identifier: rdfs:Literal [0..*]
«recommended»
+ dcat:contactPoint: vcard:Kind [0..*]
«mandatory»
+ dcatap:hvdCategory: skos:Concept [1..*]
dcat:Distribution
«mandatory»
+ dcat:accessURL: rdfs:Resource [1..*]
+ dcatap:hvdCategory: skos:Concept [0..*]
«optional»
+ dcat:downloadURL: rdfs:Resource [0..*]
+ dct:conformsTo: dct:Standard [0..*]
+ dct:rights: dct:RightsStatement [0..*]
dcat:dataset
«recommended»
0..*
dcat:distribution
«mandatory»
1..*
foaf: Agent
dct:publisher
«mandatory»
1..1
dct:publisher
0..1
«recommended»

Distribution & HVD category (issue #307)



Description

For which entities is it necessary to express the HVD category?

Motivation

Make the HVD category optional for a Distribution

- In DCAT semantics, a Distribution is dependent on its existence for a Dataset.
- The HVD category will not change for a Distribution

HVD category to be maintained instead on the level of Data Service

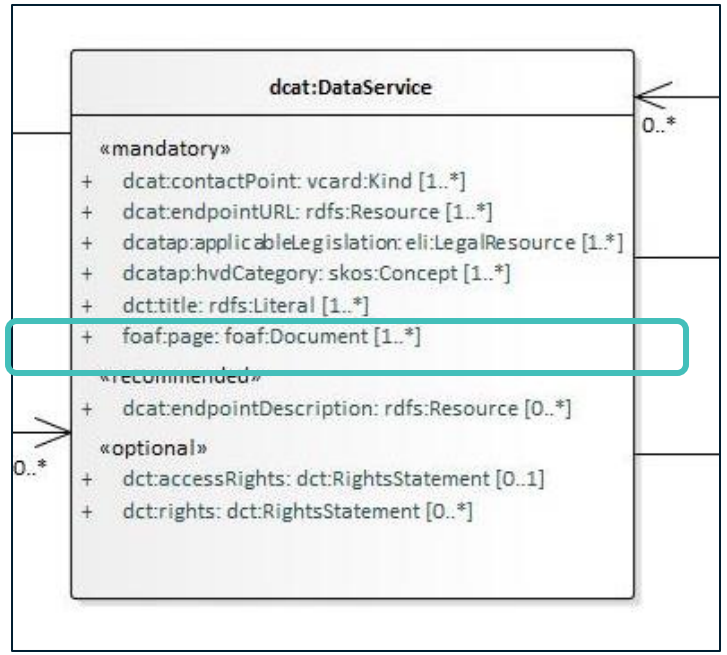
- In DCAT semantics, A Dataset and Data Service are catalogued resources
- An API can service multiple datasets from distinct domains

Proposition

- HVD category mandatory for Dataset
- HVD category mandatory for Data Service
- HVD category optional for Distribution

The HVD category is published as a controlled vocabulary by the EU Vocabularies on http://publications.europa.eu/resource/dataset/high-value-dataset-category

Property *quality of service* on data services (issue #310)



Description

Property quality of service is mapped on foaf:page.

This URI was suggested in another issue to represent the generic documentation of Data Services.

Proposition

- Add property documentation mapped to foaf:page to Data Service in DCAT-AP (optional)
- Replace the label in DCAT-AP HVD with documentation
- Add a usage note: that in the context of HVD quality of service information is documented here

Publisher property Data Service (issue #305)

Description

A Data Service is a catalogued resource at the same level of a Dataset. For Dataset a publisher is recommended. Should a Dataservice not have the same "base quality"?

Motivation

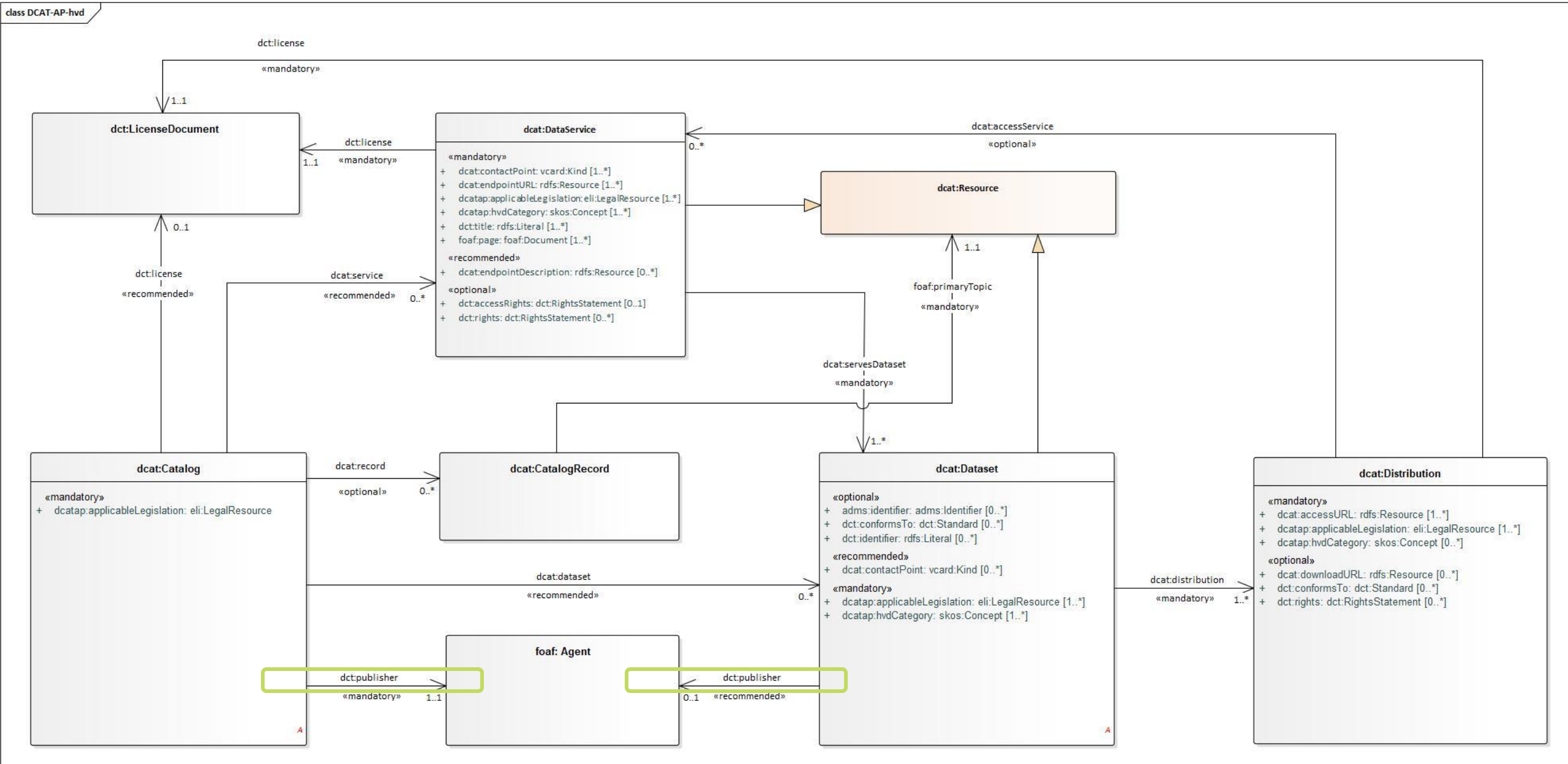
In HVD IR there has no direct request for information about the publisher of an API.
Only contact information is requested.

Proposition

To consider this more as a general DCAT-AP request rather than a HVD-specific request.

Note: if the DCAT-AP community accepts to make a publisher recommended for a Data Service, then this will be applicable for DCAT-AP for HVD.

Publisher property Data Service (issue #305)



Incorrect usage of vCard (issue #283)

Description 1

Incorrect usage of vCard for contact point in examples.

Proposition

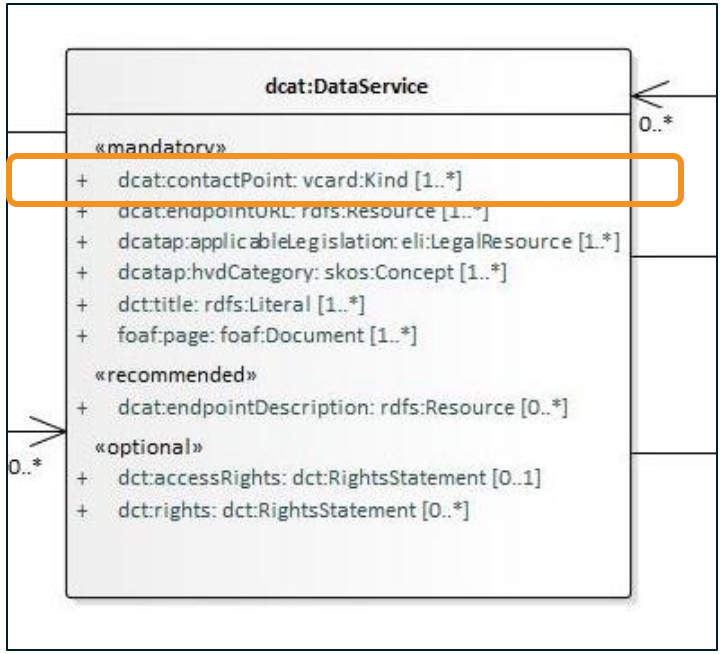
Update the examples in DCAT-AP & DCAT-AP HVD.

Description 2

The usage of abstract versus concrete subclasses of vCard.

Proposition

To consider this more of a general DCAT-AP request rather than a specific DCAT-AP for HVD request.



Semantics property *applicable legislation* for a catalogue (issue #282) 1/3

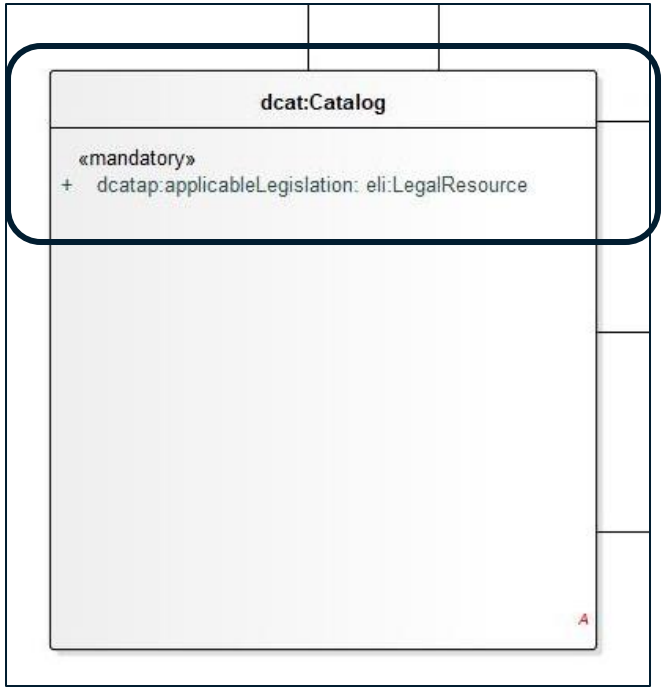
Description

The distinction between different catalogues: the generic MS (Open Data) catalogue and the catalogue that holds the metadata in scope of HVD and the reporting catalogue is unclear.

The semantics of the property r5r:applicableLegislation for a catalogue should be clarified.

Use cases to consider

- Reporting catalogue: a catalogue that contains all information from one EU MS about the MS's HVD
- Harvesting: when creating an aggregated catalogue it may be of interest to select the catalogues that contain information according to a legislation.



Semantics property *applicable legislation* for a catalogue (issue #282) 2/3

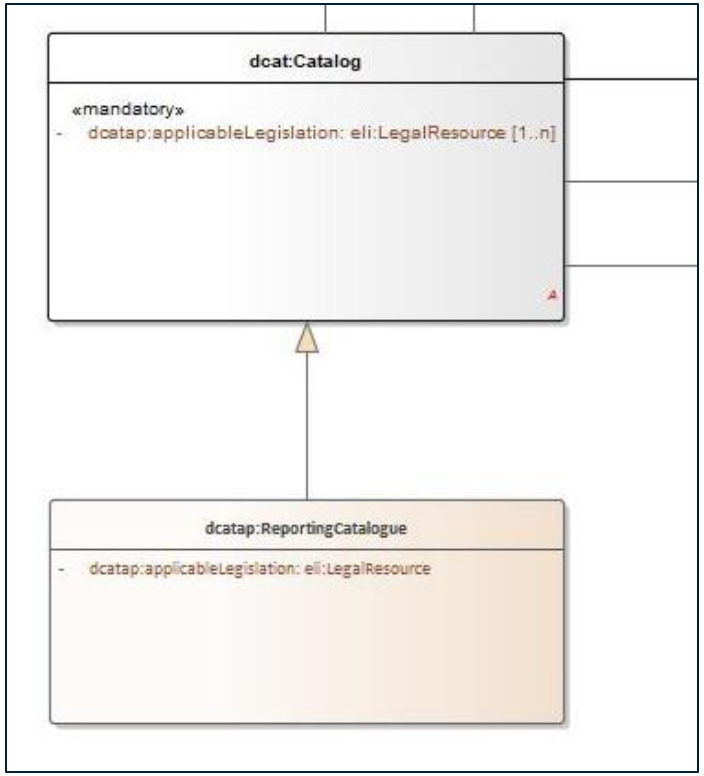
Proposition

- Applicable legislation at the level of a catalogue indicates that it contains information related to HVD, but not that all catalogued entities are subject to HVD.

  Thus r5r:applicableLegislation for a HVD catalogue contains at least a reference to eli:HVD-IR **(1..n).**

- A HVD reporting catalogue is a specific instance of all catalogues that have information related to HVD. (explicit subclass) Namely it is maintained by a MS and submitted to the reporting authority. This one will contain only information that is subject to HVD (reporting).

  Thus r5r:applicableLegistlation for a HVD reporting catalogue becomes mandatory **1..1**



Semantics property *applicable legislation* for a catalogue (issue #282) 3/3

Examples

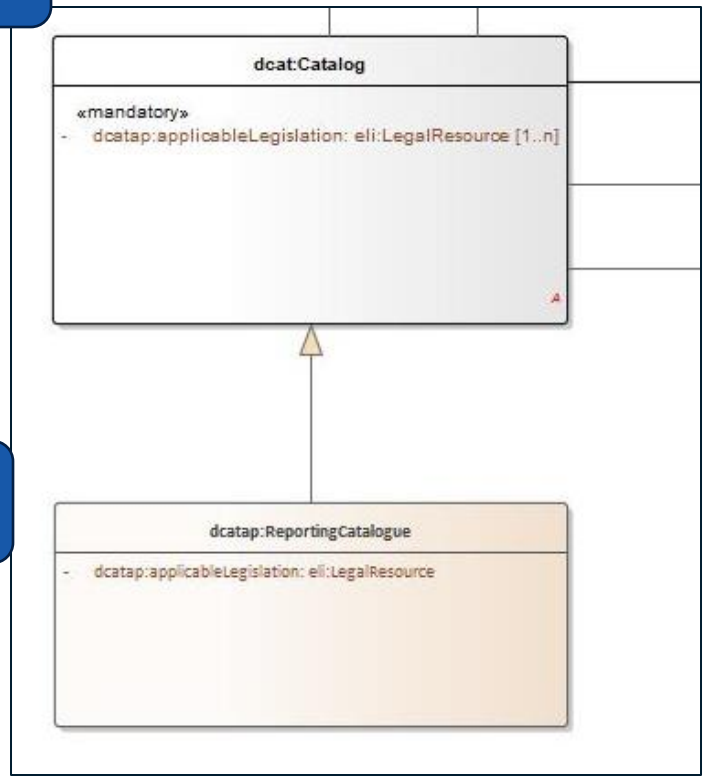
Catalogue **in scope** of Annex DCAT-AP HVD

```
_:NationalDataCatalogue a dcat:Catalog ;
    dcatap:applicableLegislation
      <http://data.europa.eu/eli/reg_impl/2023/138/oj> , # HVD
      <http://data.europa.eu/eli/dir/2019/1024/oj>, # PSI
      <http://data.europa.eu/eli/reg/2022/868/oj> ; # DGA
   dcat:dataset <datasetHVD>, <datasetDGA> .
```

Catalogue **out of scope** of Annex DCAT-AP HVD

```
_:NAPCoreCatalogue a dcat:Catalog;
    dcatap:applicableLegislation
       <http://data.europa.eu/eli/dir/2010/40/oj>; # NAPCore
    dcat:dataset <datasetMobility>.
```

```
_:NationalHVDReportingCatalogue a dcat:Catalog ;
    dcatap:applicableLegislation
      <http://data.europa.eu/eli/reg_impl/2023/138/oj>; # HVD
   dcat:dataset <datasetHVD>.
```



A HVD reporting Catalogue

Audience & Requirements

Which additional information is provided, too many properties listed? (issue #312) 1/2

Description

Many of the properties listed do not add any additional requirement compared to DCAT-AP 2.x and 3, this makes the specification longer than necessary.

Two audiences:

- The HVD policy officers
  - have interest in how the HVD IR terms are represented in DCAT-AP metadata
- The DCAT-AP catalogue maintainers
  - have interest in which additional constraints are imposed

Which additional information is provided, too many properties listed? (issue #312) 2/2

Proposition

- Align with the profiling guidelines of the next webinar
- Improve connecting the terms with the HVD IR
- Keep (and further reduce) the list of properties to a minimum for the DCAT-AP annex for HVD to limit interdependency.
- Keep the annex version-agnostic (more recent than 2.x) as much as possible.

Impact

The editorial rewrite can be substantial, no adaptation to the formal requirements.

Domain versus general metadata requirements (1/2)

Proposition

- The HVD IR requests information (metadata) according to the best practices in each domain.
- DCAT-AP HVD expresses the general metadata requirements in the HVD IR in DCAT(-AP) terminology.
- To **conform to the HVD IR**, each domain must be able to provide the information in DCAT-AP HVD. This might impact the current agreements or best practices in a domain.

Suggested approach

- Use **DCAT-AP HVD as a reference point**: How can the domain-specific guidelines be adapted to provide the DCAT-AP HVD information?
- See DCAT-AP HVD as the aggregation language for all metadata to be supplied for the (cross-domain) reporting.

Finalisation of the annex

- All input will be consolidated & processed.
- Deadline to provide additional input via GitHub on the **discussed** issues is **01/12/2023**.
- Based on the above, we will prepare the SEMIC **recommendation** of DCAT-AP for HVD, which will be **presented** to the **PSI Expert Group** on 14/12/2023.
- Next steps after the PSI Expert Group are listed in the ‘Upcoming & ongoing activities on other DCAT-AP extensions.

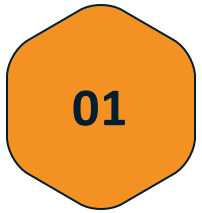
Link to the specification:

https://semiceu.github.io/uri.semic.eu-generated/DCAT-AP/releases/2.2.0-hvd/

Break (5’)

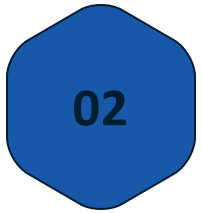
Upcoming & ongoing activities on other DCAT-AP extensions

State of Play



DCAT-AP

The generic DCAT-AP profile.



Other SEMIC profiles

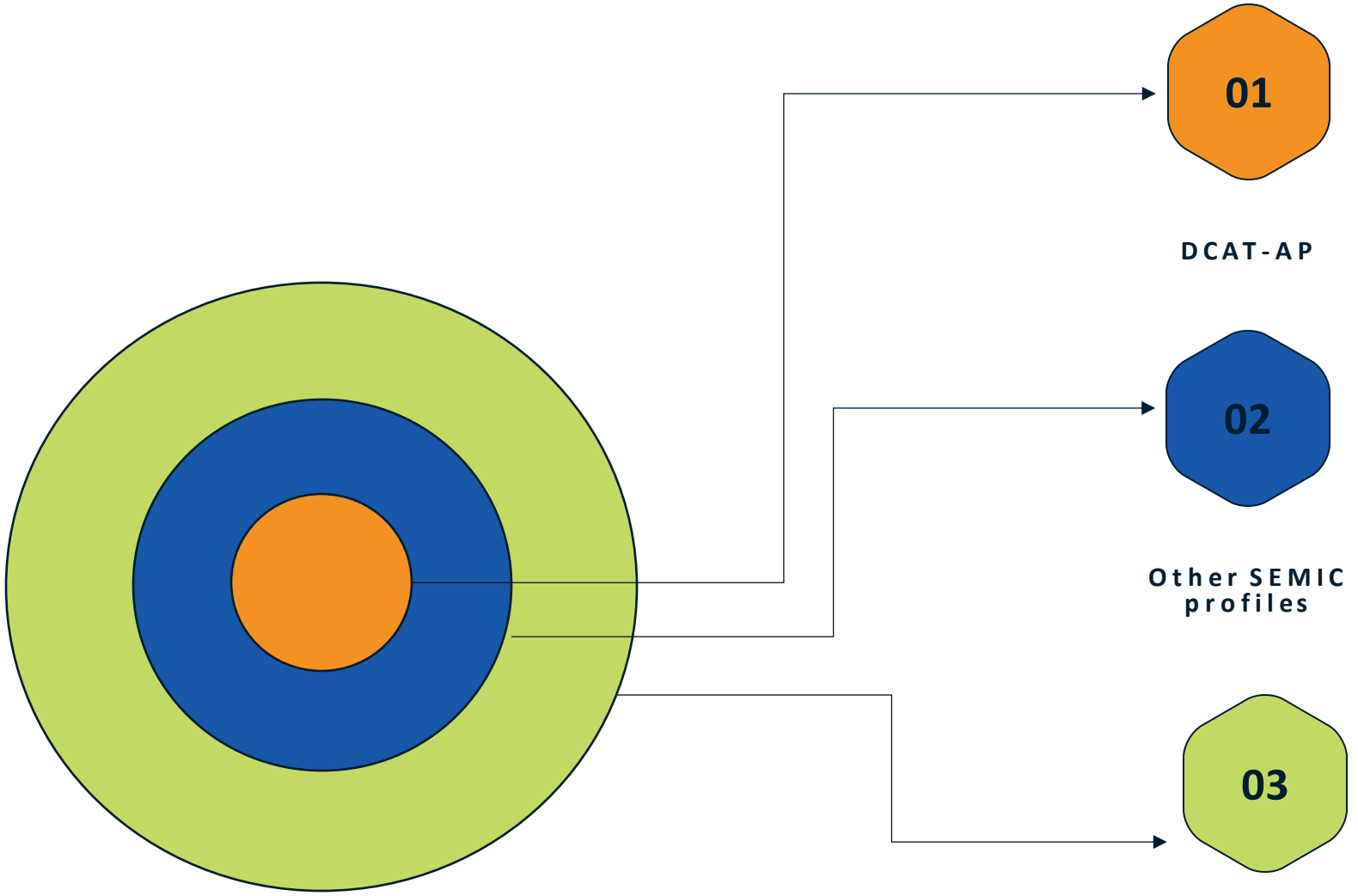
Activities in other SEMIC DCAT-AP profiles

- GeoDCAT-AP
- StatDCAT-AP
- BRegDCAT-AP
- DCAT-AP HVD

Dataspaces

Status about activities in the broad area around DCAT-AP

State of Play



SEMIC takes care of aligning specifications

DCAT-AP specific issues

DCAT-AP

Review period from 18 July 2023 until 30 September 2023

53 Issues in total:

- 14 + bugs or requests for information
- 24+ issues with highlighting the alignment from DCAT-AP 2.1 to DCAT-AP 3.0
- 16 technical topics for next webinar

Link to the specification: https://semiceu.github.io/uri.semic.eu-generated/DCAT-AP/releases/3.0.0/

Topics for the webinar on 21/11/2023

DCAT-AP

Cross-concerns topic (c.f.r. the editorial topic in DCAT-AP HVD):

- Guidelines for building DCAT-AP profiles (#289, #220, #163, #278)
- Guidelines for profiling themes and other properties (#316, #314)

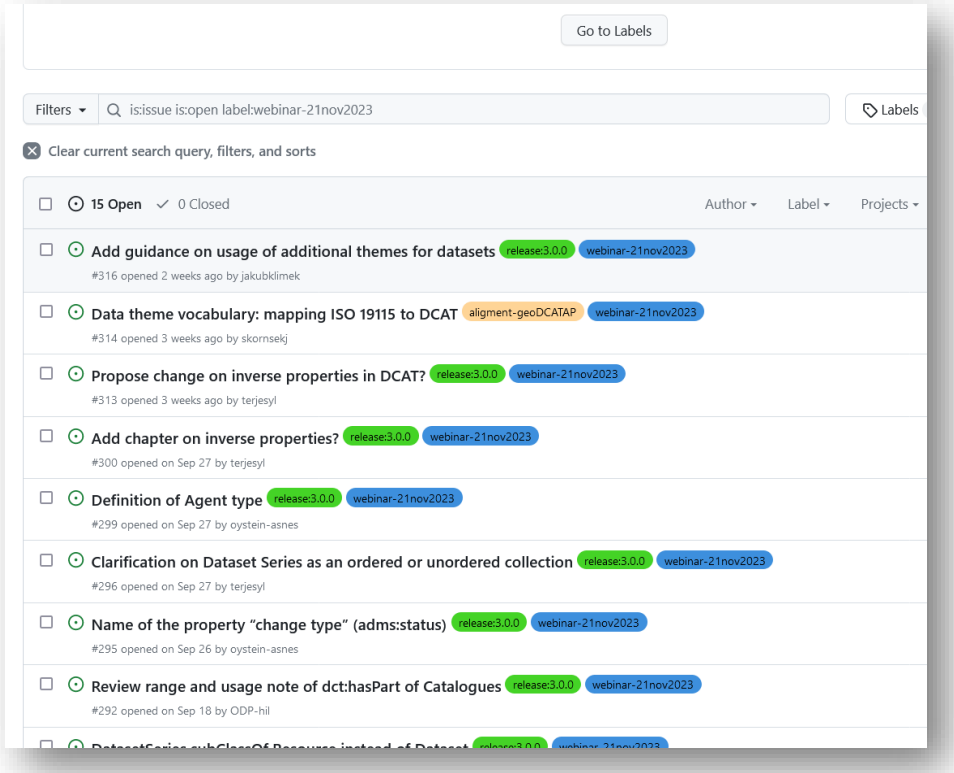
to enhance the readability and the interoperability of profiles.

Detailed topics:

- ContactPoint (cfr HVD), Agent Types (#283, #299)
- Change Type property (#295)
- Cardinality conformsTo CatalogueRecord (#284)
- Dataservice properties (#272, #305) (cfr HVD)

Alignment DCAT 3.0 topics:

- Dataset series: ordening, containment (#296, #275)
- Inverse properties (#313, #300)
- Catalogue composition (#292)



Supporting SEMIC DCAT-AP namespaces

Other

- SEMIC maintains several PURI namespaces supporting DCAT-AP profiles
- Draft versions are available for review
- HVD falls under the umbrella of the generic DCAT-AP namespace

PURI	Purpose
http://data.europa.eu/r5r	The generic DCAT-AP namespace
http://data.europa.eu/930	The namespace for specific GeoDCAT-AP terms
http://data.europa.eu/s1n	The namespace for specific StatDCAT-AP terms

GeoDCAT-AP

Other

Announcement of GeoDCAT-AP 3.0

- Collaboration of the geo-community (INSPIRE) and SEMIC
- Supported by DG ENV, JRC and SEMIC (DIGIT)

Motivation

- High-Value Datasets (and the activity on DCAT-AP HVD) brought the profile to attention
- The ambition is to:
  - Better embed GeoDCAT-AP in both communities (Geo- and DCAT-AP community)
  - Align with DCAT-AP 3.0

Activities to start after the INSPIRE Conference on 28-29 November 2023.

StatDCAT-AP

Other

- Ongoing internal activities of SEMIC to assess how it could be aligned with DCAT-AP 3.0 and DCAT-AP HVD.

- At this moment no immediate activities are planned.

BRegDCAT-AP

Other

- Webinar of 21 april 2023 concluded with the agreement to integrate BRegDCAT-AP as annex to DCAT-AP similar to DCAT-AP HVD.

- Recently, interest has been raised on the use of BRegDCAT-AP.

- Based on bilateral discussions, the integration of BRegDCAT-AP as an annex to DCAT-AP will be performed.

DCAT-AP HVD

Other

- Deadline for last input on the presented issues via GitHub is 1/12/2023.
- SEMIC recommendation of DCAT-AP for HVD will be presented to the PSI Expert Group on 14/12/2023
- SEMIC will continue to maintain the annex and keep it aligned with DCAT-AP & its other extensions.
  - When issues are relevant for HVD, they will be tagged as such on the general DCAT-AP GitHub repository.
- The first release will serve as a stable version which can be used for the alignment with INSPIRE and GeoDCAT-AP.

MLDCAT-AP (pilot)

Other

Context

There is no lack of machine learning models, algorithms or datasets that have been are an input or output for them. But how do you make them findable and shareable?

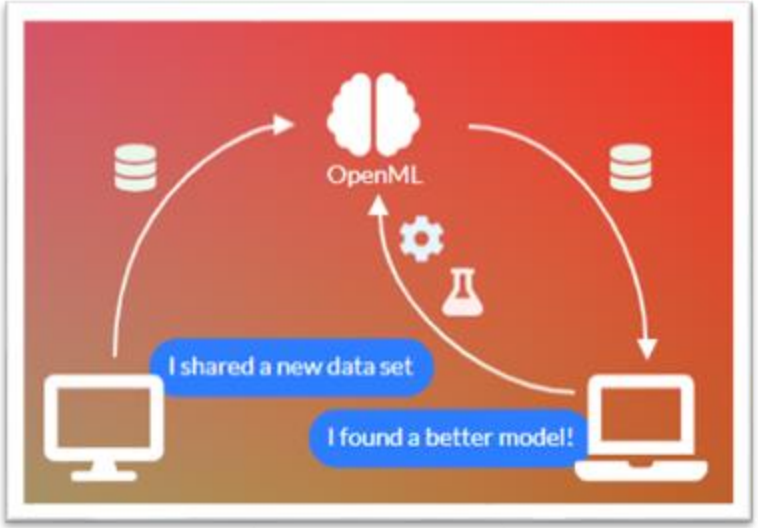
Pilot

- DCAT-AP was used to describe these models in a common metadata language in order to better catalogue them.
- Collaboration with OpenML (a platform where end-users can share datasets and apply machine learning models.)

Result

https://semiceu.github.io/MLDCAT-AP/releases/1.0.0/

Contact us or have a look at the specification if interested



Overview of different activities

Mobility DCAT-AP

- NAPCORE Recommendation 16 October 2023
- https://w3id.org/mobilitydcat-ap/releases/1.0.0/

DCAT-AP Health

- Biweekly working group meetings
- December 2023: a draft specification that will be tested in a pilot implementation (Q1 2024)

Smart Cities Data Space

- DCAT-AP included in the technical blueprint of the Data Space for Smart and Sustainable Cities & Communities

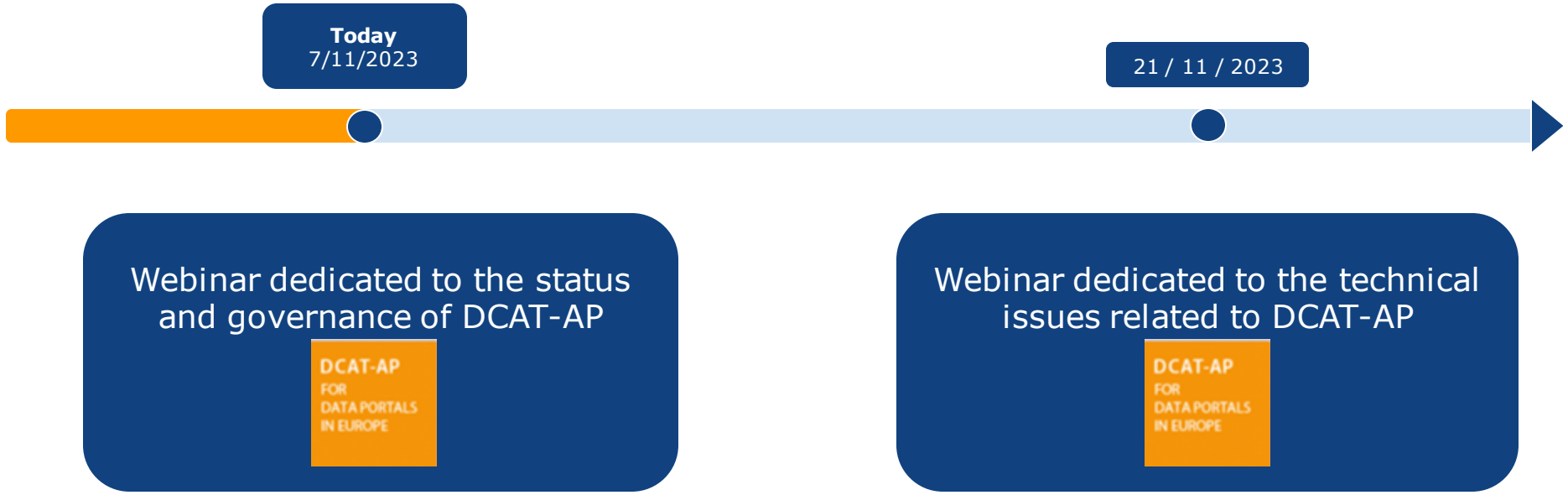
Data Spaces Support Centre

- DCAT-AP has been identified as a core component for cross-data space exchange
- Data Spaces Blueprint v0.5 live since September 2023
  - V1.0 is expected in April 2024

Are you aware of other activities? (provide links in chat)

Next steps

Join us on our next webinar!



Topics for the webinar on 21/11/2023

Cross-concerns topic:

- Guidelines for building DCAT-AP profiles (#289, #220, #163, #278)
- Guidelines for profiling themes and other properties (#316, #314)

Detailed topics:

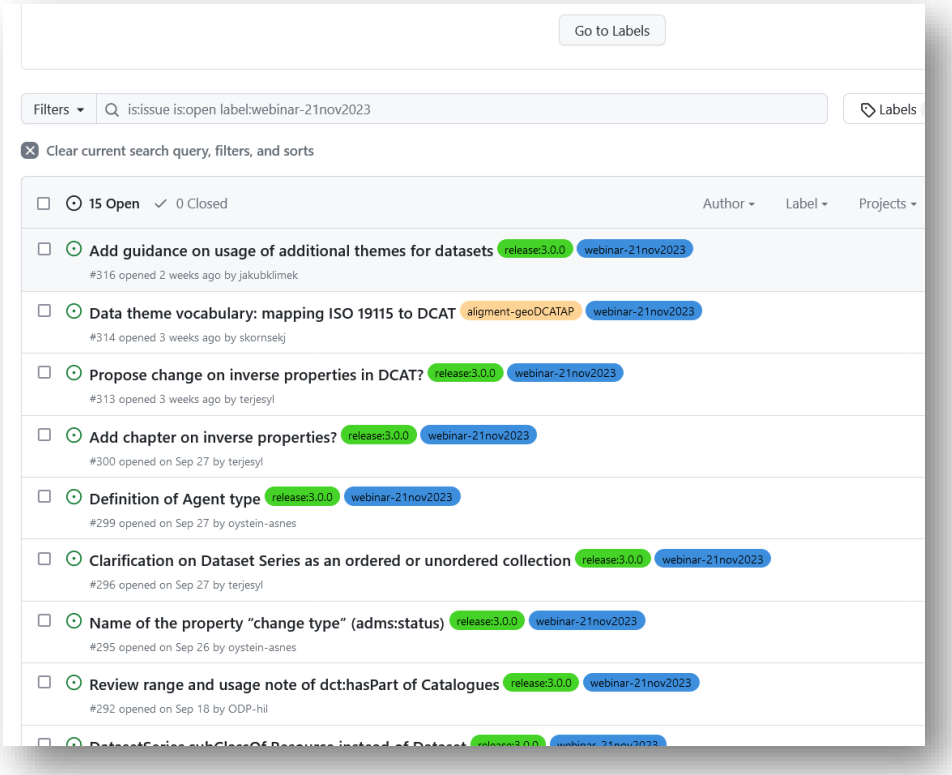
- ContactPoint, Agent Types (#283, #299)
- Change Type property (#295)
- Cardinality conformsTo CatalogueRecord (#284)
- Dataservice properties (#272, #305)

Alignment 3.0 topics:

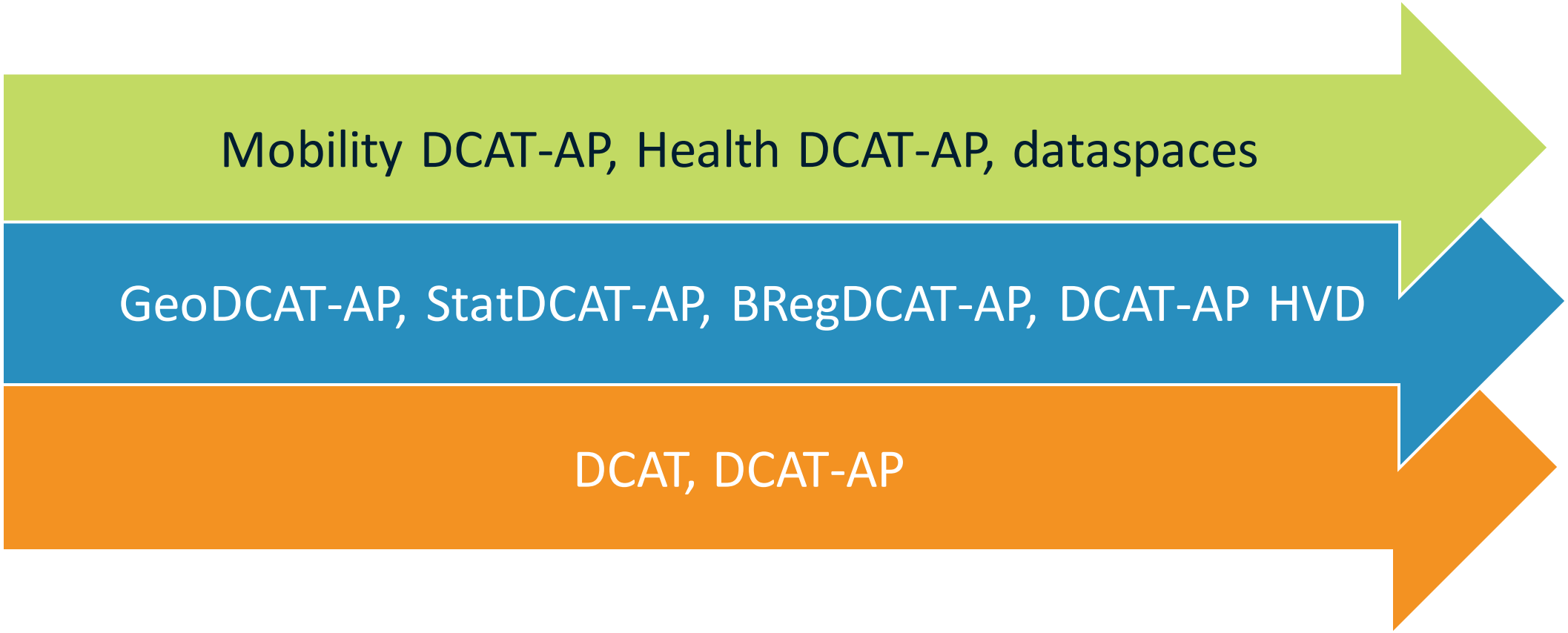
- Dataset series: ordening, containment (#296, #275)
- Inverse properties (#313, #300)
- Catalogue composition (#292)

https://github.com/SEMICeu/DCAT-AP/issues

label:webinar-21nov2023



Moving forward together



Thank you

interoperable europe

innovation ∞ govtech ∞ community

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DIGIT-INTEROPERABILITY@ec.europa.eu

https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe