



25 APRIL
2023

SEMIC Webinar: ADMS & ADMS-AP

DIGIT.D2 - Interoperability.



Objective of this webinar

- ① To provide a coherent and trusted maintenance for *the vocabulary ADMS* (the **A**sset **D**escription **M**etadata **S**chema),
- ② the associated *controlled vocabularies* and
- ③ a first outlook on the future of the *application profile ADMS-AP*.

Agenda

1

Welcome

2

ADMS Vocabulary: introduction and proposal for road ahead

3

ADMS controlled Vocabularies

4

ADMS-AP: an application profile on top of ADMS

5

Wrap up and next steps

Workshop practicalities



Please mute your microphones



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



The workshop will be recorded

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

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
PUBLIC
ORGANISATION
VOCABULARY

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

CORE
CRITERION &
EVIDENCE
VOCABULARY

The requirements and evidence of a procedure or formal process.

Vocabularies

Application Profiles

CORE
PUBLIC
SERVICE
VOCABULARY
Application Profile

DCAT-AP
FOR
DATA PORTALS
IN EUROPE

GeoDCAT-AP
FOR
GEOSPATIAL
DATASETS

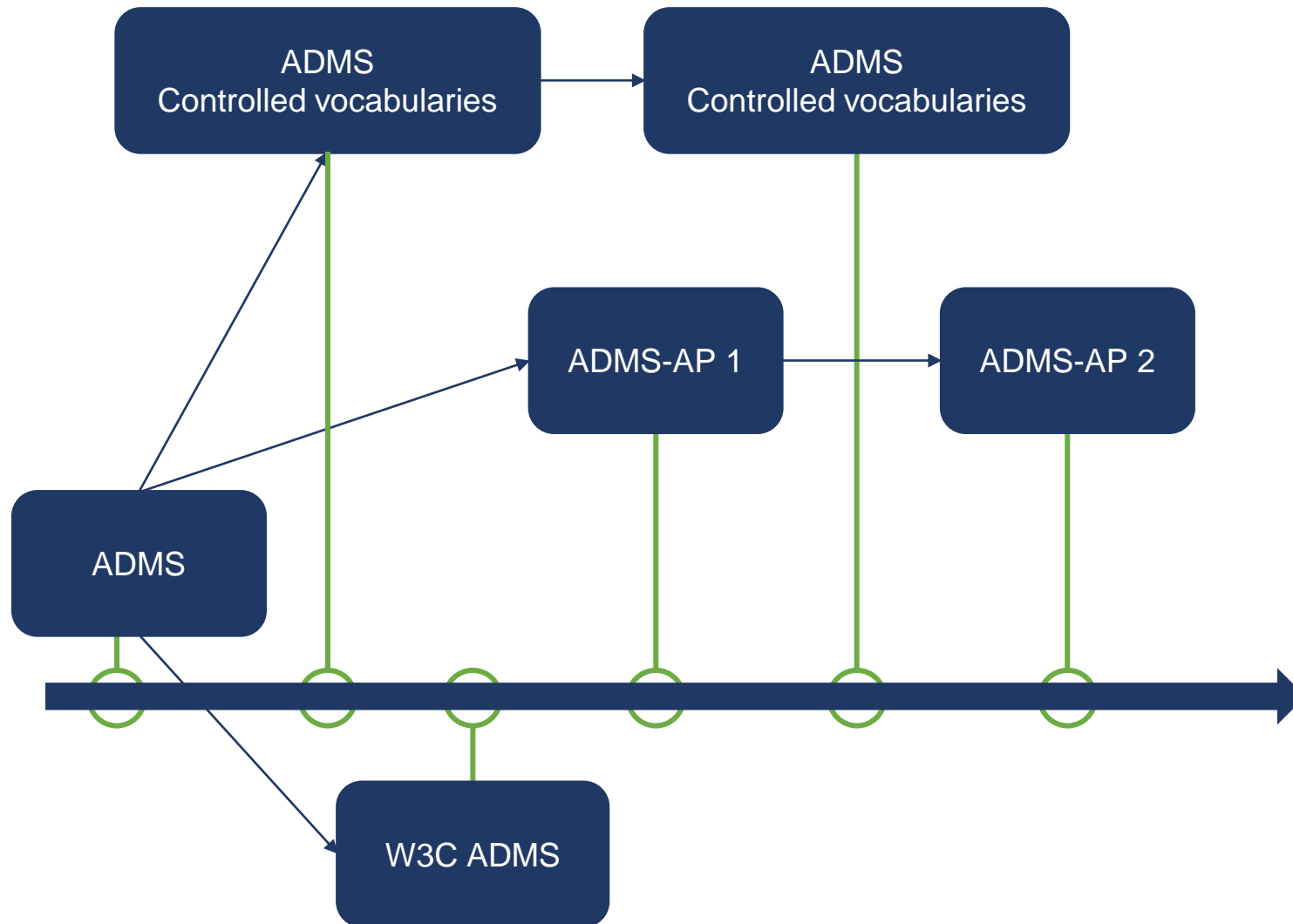
StatDCAT-AP
FOR
STATISTICAL
DATASETS

ADMS
ASSET
DESCRIPTION
METADATA
SCHEMA

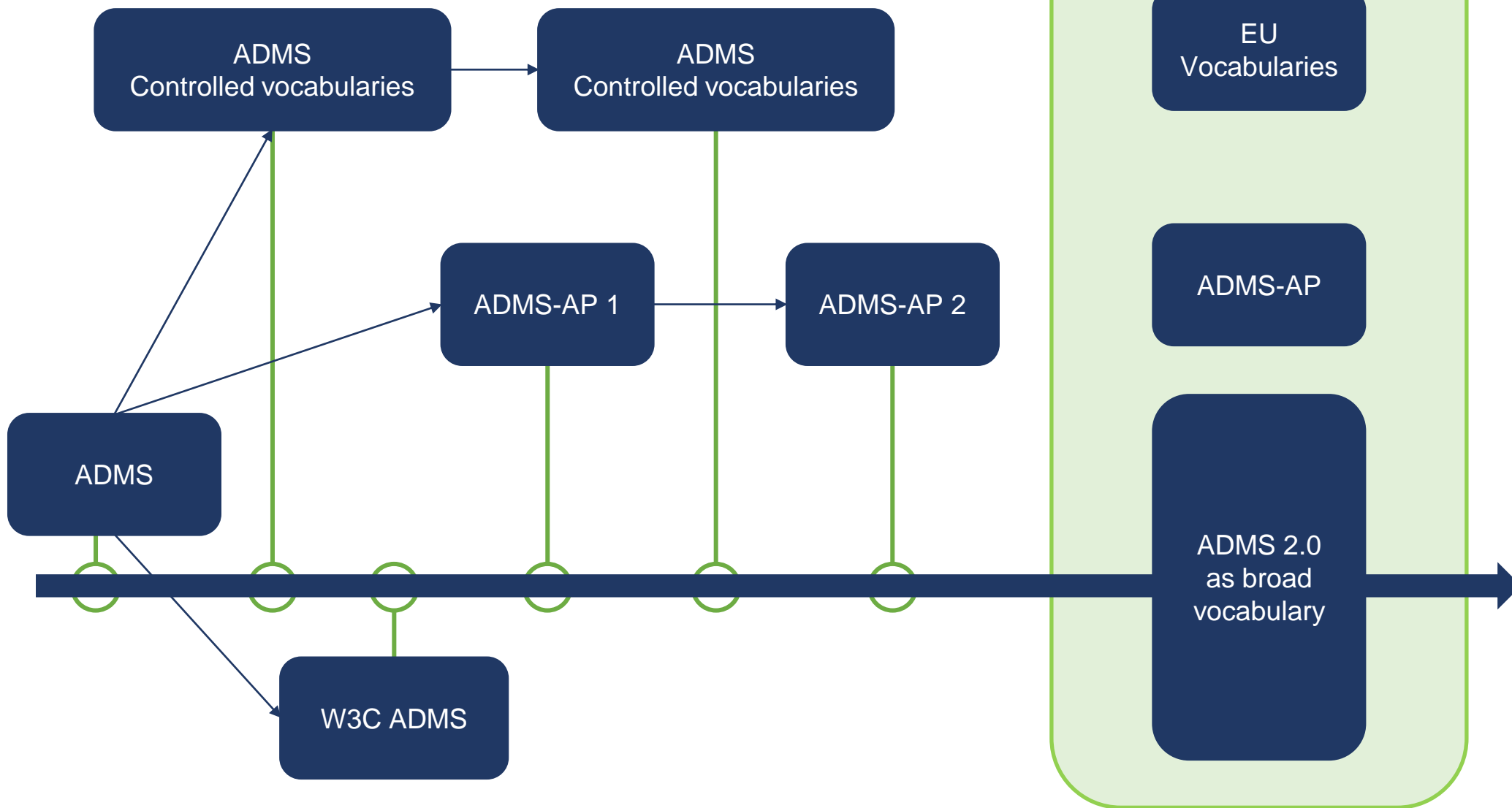


ADMS history

ADMS history



ADMS history





ADMS vocabulary

Status

- WG note since 2014
<https://www.w3.org/TR/vocab-adms/>
- Tightly connected with DCAT
- Not adapted to recent versions of DCAT

Usage assessment

Use is mostly at the vocabulary level (term based)

e.g. adms:identifier, adms:status, adms:sample,
adms:versionNotes

(in W3C DCAT or DCAT-AP)

Definition assessment

Semantic challenges:

- Definitions are broader than DCAT
- ADMS definitions are based on FRBR
- Definitions allow cases beyond the scope of the use cases.

FRBR = Functional Requirements for Bibliographic Records

Maintenance assessment

Experience challenges:

- Provide a community to address questions to
- Provide for this vocabulary the same experience as for the other SEMIC Core Vocabularies and Application Profiles.

Scope (1)

ADMS, the Asset Description Metadata Schema, is a **profile of DCAT** [DCAT] for describing so-called **Semantic Assets** (or just 'Assets'), that is, **highly reusable metadata (e.g. xml schemata, generic data models) and reference data (e.g. code lists, taxonomies, dictionaries, vocabularies)** that are used for eGovernment system development [TOGD].

Someone **searching for an Asset** is likely to have **different needs, priorities and expectations** than someone searching for a dataset in a data catalog and these differences are reflected in ADMS. In particular, users seeking an Asset are likely to be searching **for a document** — something they can open and read using familiar desktop software, as opposed to something that needs to be processed. Of course this is a very broad generalization. If a code list is published as a SKOS Concept scheme then it is both an Asset and a dataset and it can be argued that all Assets are datasets.

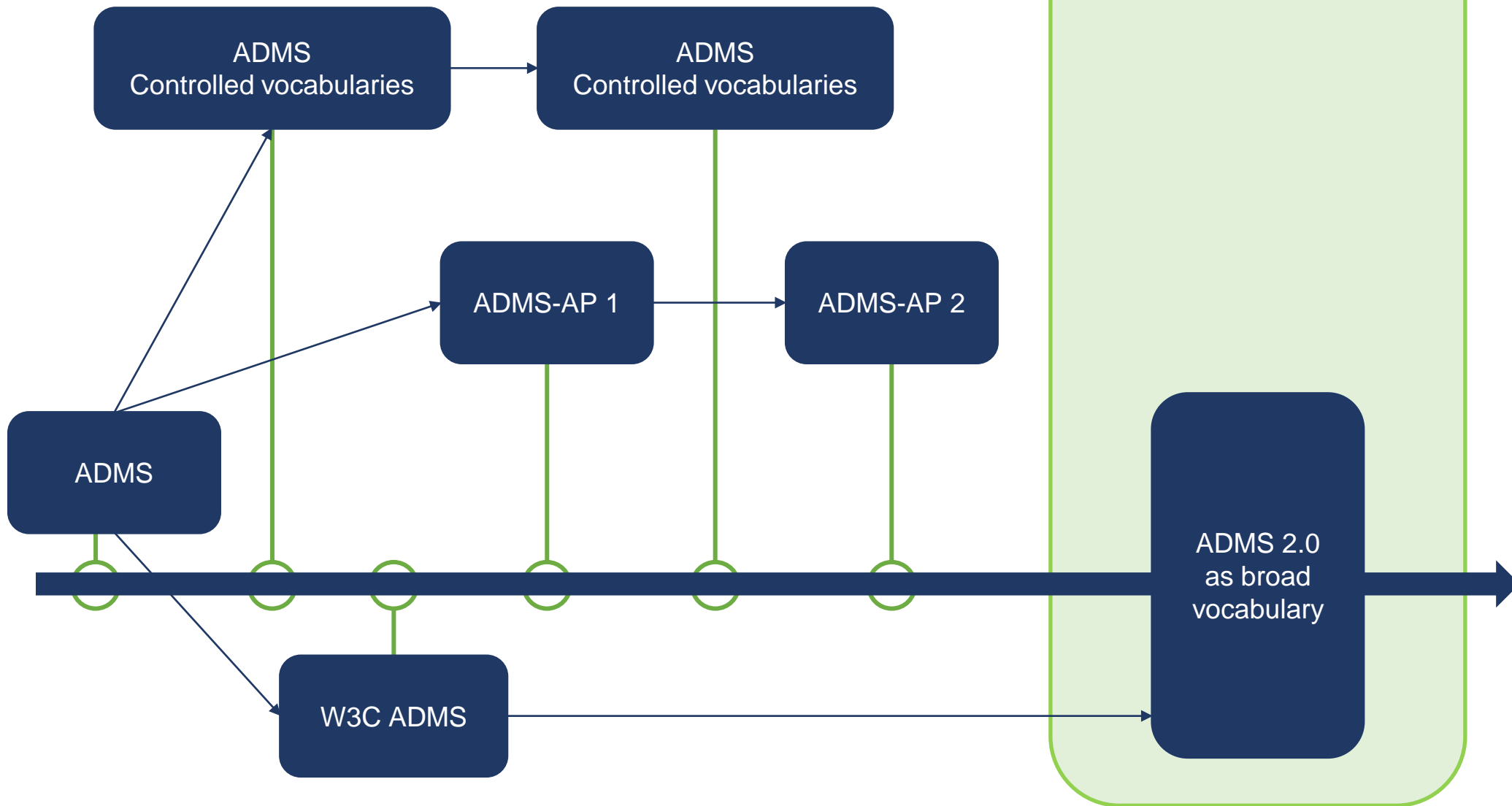
Therefore **the difference in user expectation is at the heart of what distinguishes ADMS as a profile of DCAT**. A further distinction between DCAT and ADMS can be made in that DCAT is designed to facilitate interoperability between data catalogs , i.e. the catalog itself is at the heart of the vocabulary. ADMS is focused on the assets within a catalog.

Scope (2)

Scope as profile challenges:

- With the existence of W3C DCAT and profiles such as DCAT-AP, is there a need for a thematic profile for semantical assets?
- How should it be maintained?

ADMS Proposal



Proposal

Make ADMS a broader vocabulary under the maintenance of SEMIC in collaboration with W3C

Changes:

- Decoupling from DCAT
- Editorial rewrite
- Minor changes (in line with first bullet)

Proposal

Impact:

- Definitions can be maintained as is
- Restrict ADMS to the terms in the namespace
- Maintenance of ADMS gets decoupled from DCAT
- To maintain a historical reference, the usage of ADMS as a profile for DCAT is added as example.
- Zero impact on current use

Proposal overview

Unofficial Draft

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ADMS Vocabulary

Unofficial Draft 05 April 2023

▼ More details about this document

Latest published version:
<https://www.w3.org/TR/vocab-adms>

Latest editor's draft:
<https://semiceu.github.io/ADMS/releases/2.0>

History:
[Commit history](#)

Latest Recommendation:
<https://www.w3.org/TR/vocab-adms>

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Feedback:
[GitHub SEMICEU/ADMS](#) (pull requests, new issue, open issues)

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§ 1. Introduction

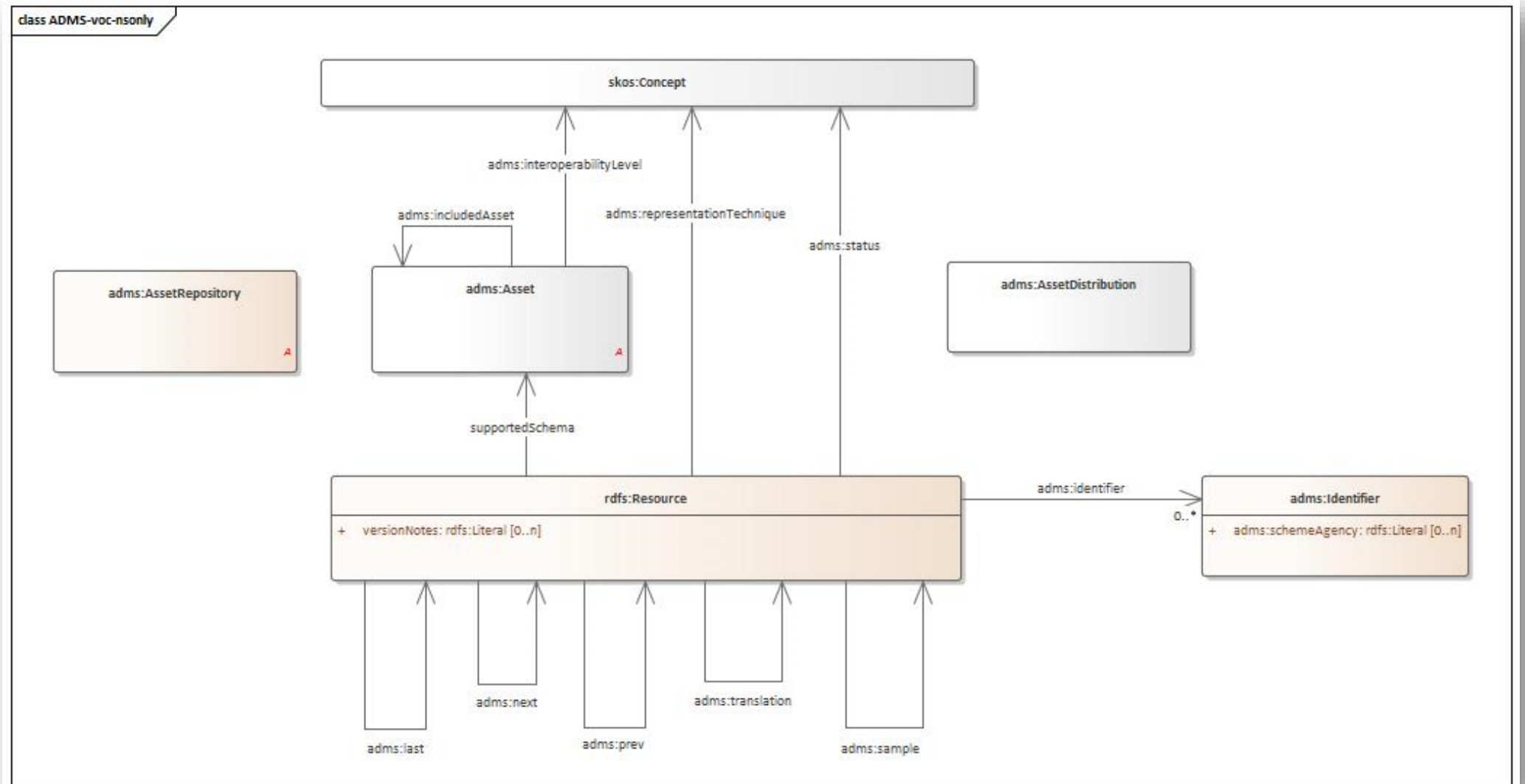
This document describes a **vocabulary**, in this case **ADMS Vocabulary** specification designed so that the included terms are highly reusable. T with a limited set of constraints.

Introduction & Motivation

Vocabulary

Example:
Historic use of ADMS in the context of
DCAT

Proposal overview



ADMS overview: classes

| Label | URI | Definition |
|--------------------|------------------------|---|
| Asset | adms:Asset | An abstract entity that reflects the intellectual content of the asset and represents those characteristics of the asset that are independent of its physical embodiment. This abstract entity combines the FRBR entities work (a distinct intellectual or artistic creation) and expression (the intellectual or artistic realization of a work) |
| Asset Distribution | adms:AssetDistribution | A particular physical embodiment of an Asset, which is an example of the FRBR entity manifestation (the physical embodiment of an expression of a work). |
| Asset Repository | adms:AssetRepository | A system or service that provides facilities for storage and maintenance of descriptions of Assets and Asset Distributions, and functionality that allows users to search and access these descriptions. An Asset Repository will typically contain descriptions of several Assets and related Asset Distributions. |
| Identifier | adms:Identifier | This is based on the UN/CEDFACT Identifier class. |

ADMS overview: properties

| Label | URI | Definition |
|--------------------------|------------------------------|--|
| identifier | adms:identifier | Links a resource to an adms:Identifier class. |
| included asset | adms:includedAsset | An Asset that is contained in the Asset being described, e.g. when there are several vocabularies defined in a single document. |
| interoperability level | adms:interoperabilityLevel | The interoperability level for which the Asset is relevant. |
| last | adms:last | A link to the current or latest version of the Asset. |
| next | adms:next | A link to the next version of the Asset. |
| prev | adms:prev | A link to the previous version of the Asset. |
| representation technique | adms:representationTechnique | More information about the format in which an Asset Distribution is released. This is different from the file format as, for example, a ZIP file (file format) could contain an XML schema (representation technique). |
| sample | adms:sample | Links to a sample of an Asset (which is itself an Asset). |
| schema agency | adms:schemaAgency | The name of the agency that issued the identifier. |

ADMS overview: properties

| Label | URI | Definition |
|------------------|----------------------|---|
| status | adms:status | The status of the Asset in the context of a particular workflow process. |
| supported schema | adms:supportedSchema | A schema according to which the Asset Repository can provide data about its content, e.g. ADMS. |
| translation | adms:translation | Links Assets that are translations of each other. |
| version notes | adms:versionNotes | A description of changes between this version and the previous version of the Asset. |

Issue #3: Range of adms:sample

- Range was adms:Asset
- adms:Asset was defined as subclass of dcat:Dataset
- In DCAT-AP adms:sample has as range dcat:Distribution

Proposal:

Range of adms:sample = rdfs:Resource

Issue #4: Typo adms:schemaAgency

- In the RDF serialisation adms:schem**e**Agency was used
- In the HTML document adms:schem**a**Agency is used

Proposal:

use the HTML URI as normative URI

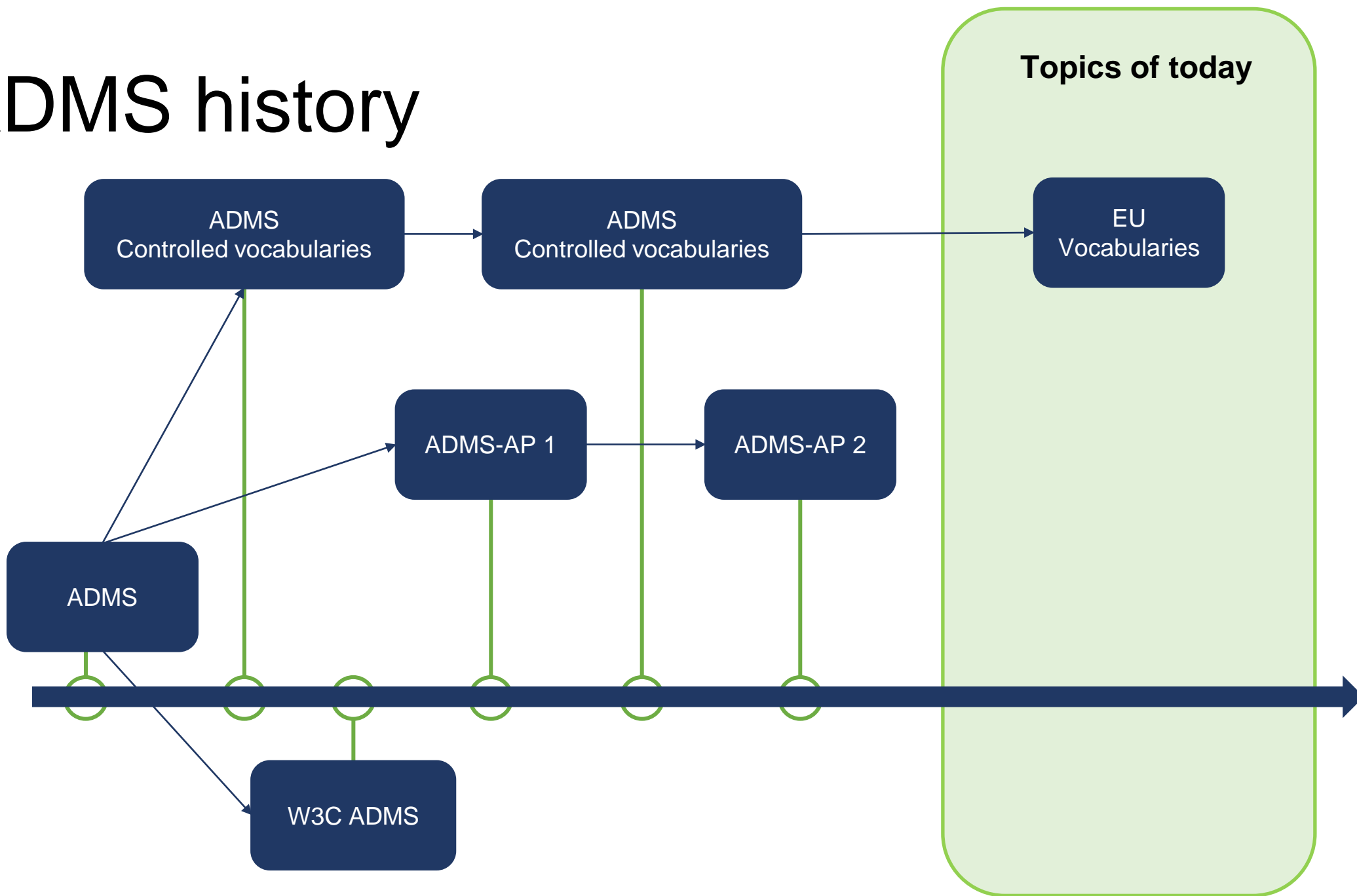


Break



ADMS controlled vocabularies

ADMS history



ADMS controlled vocabularies

<http://purl.org/adms/> is a collection of controlled vocabularies supporting ADMS

- ADMS CV's are less known and/or used
- ADMS maintenance happens on ad hoc basis
- In the past, as part of DCAT-AP activities, step-by-step the maintenance of controlled vocabularies have been transferred to the PO.
e.g. Distribution availability & Dataset status

ADMS controlled vocabularies: overview

From: https://github.com/SEMICEu/ADMS-AP/blob/master/purl.org/ADMS_SKOS_v2.00.ttl

- <http://purl.org/adms/status/1.0> : *status* → **NAL dataset status**
- <http://purl.org/adms/assettype/1.0> : *kind of semantic assets* → **NAL dataset type**
- <http://purl.org/adms/representationtechnique/1.0> : *logical format* → **NAL file type**
- <http://purl.org/adms/changetype/1.0> : *created/updated/deleted*
- <http://purl.org/adms/interoperabilitylevel/1.0>: *EIF layers*
- <http://purl.org/adms/licencetype/1.0> : *categorisation + generic names of clauses*
(<http://purl.org/adms/licencetype/2.0>)
- <http://purl.org/adms/publishertype/1.0>: *grouping of organisations*

Next steps

- Transfer the maintenance of the controlled vocabularies to the EU Vocabularies.
→ old purl.org URIs will become secondary to the new EU vocabularies.
- If you use these vocabularies: assess them for improvements.

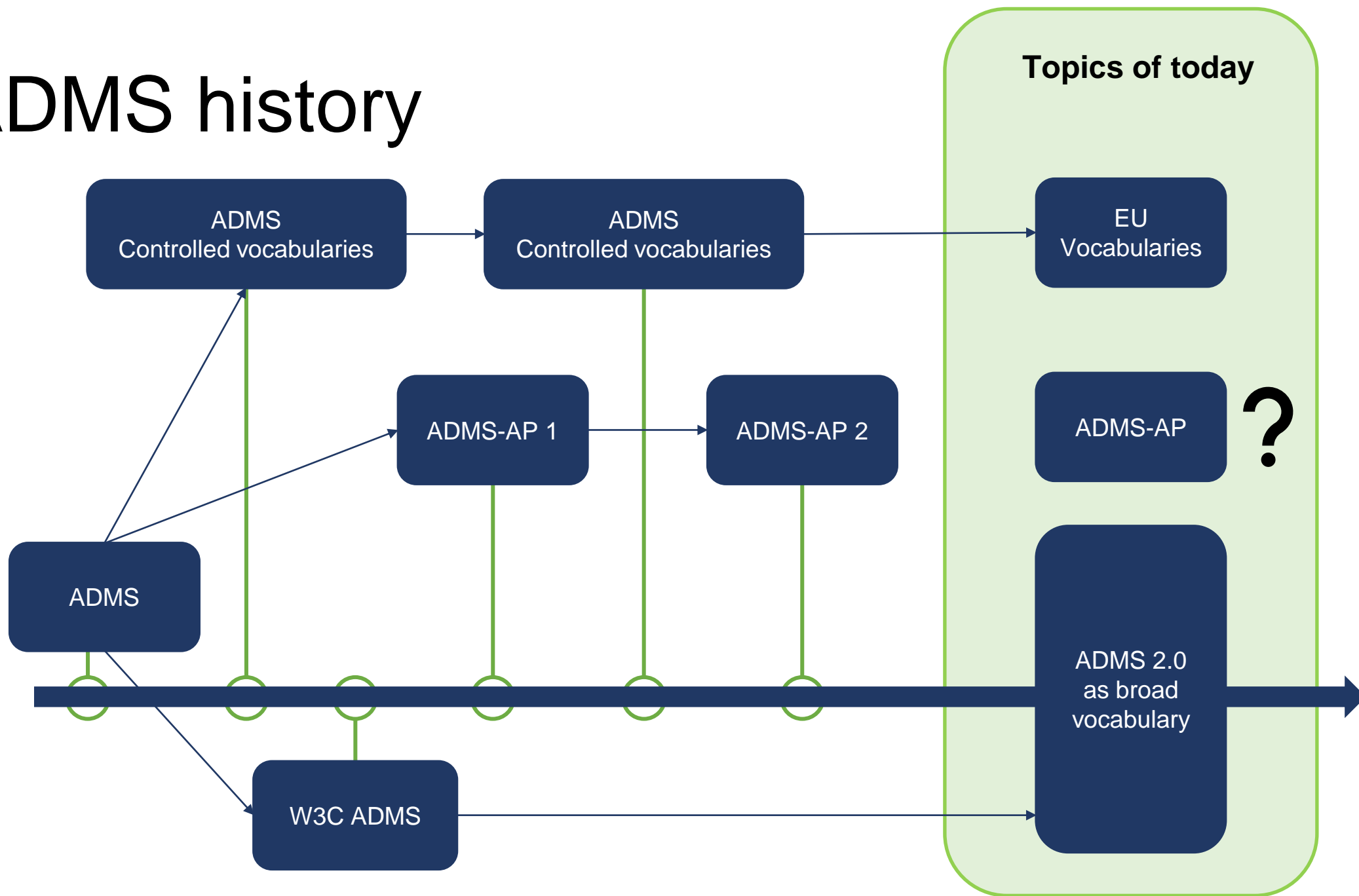


Break

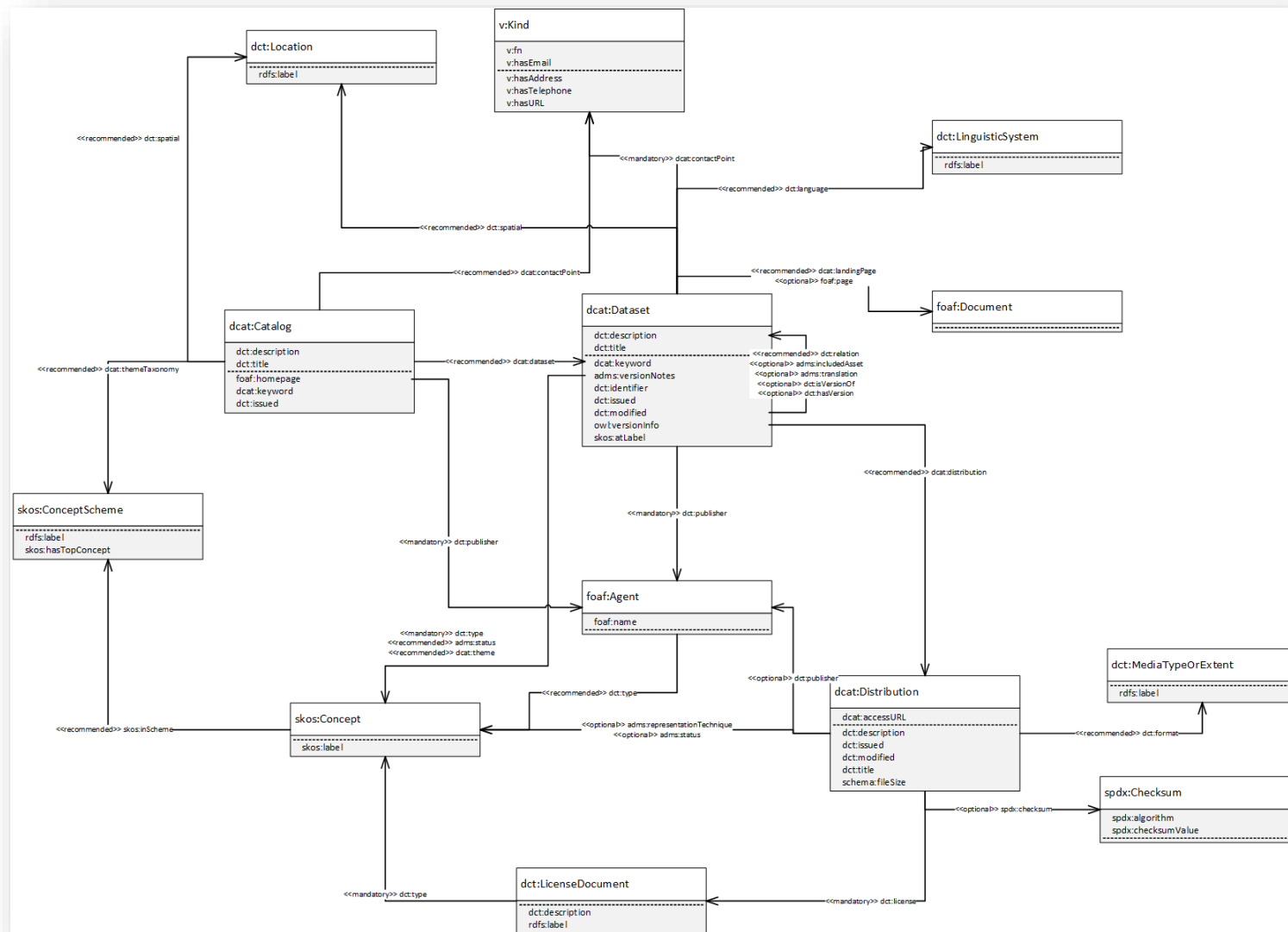


ADMS-AP Community

ADMS history



ADMS-AP overview



ADMS-AP history

Version 1: Close to ADMS as profile of DCAT with additional constraints for the emerging JoinUp platform.

Version 2: Addressed use case where the JoinUp catalogue could be more easily merged into the DEU.

Main change: all subclass relationships were materialised in the mapping

- e.g. adms:Asset was replaced with dcat:Dataset while maintaining definitions and other semantics.
- Is still based on DCAT 1 (Catalogue, Dataset, Distribution)

Impact of ADMS 2.0 on ADMS-AP 2

→ Only editorial impact

e.g. The references to used controlled vocabularies could be replaced with the references of the EU Vocabularies.

ADMS-AP motivation for substantial revision

DCAT has moved on (version 2.0 → version 3.0 upcoming)

- Allows for cataloguing other things than datasets (dcat:Resource)

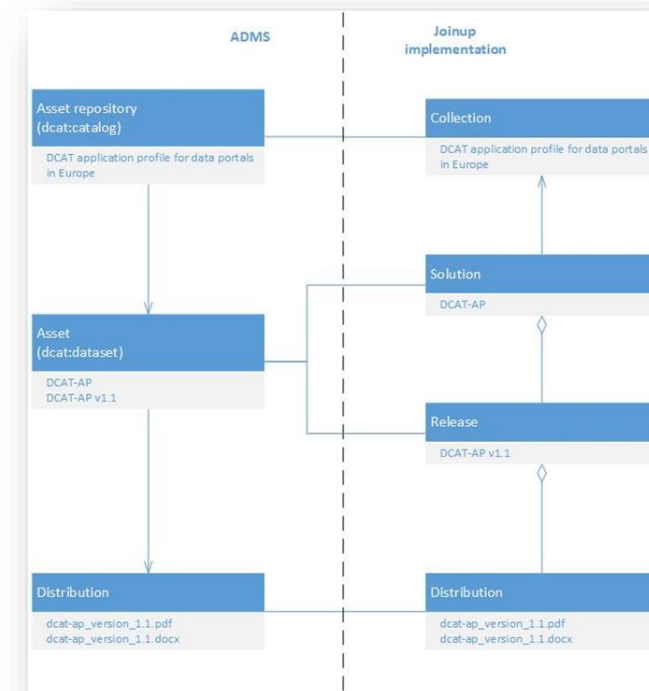
ADMS-AP 2 can be considered as a DCAT profile (from the used URIs perspective)

- Possibility to rename to a more appropriate name
- Is ADMS-AP a DCAT-AP profile?
- Does ADMS-AP address the right use cases?

ADMS-AP: use case JoinUp

As catalogue for *solutions* (assets) on supporting interoperability (JoinUp):

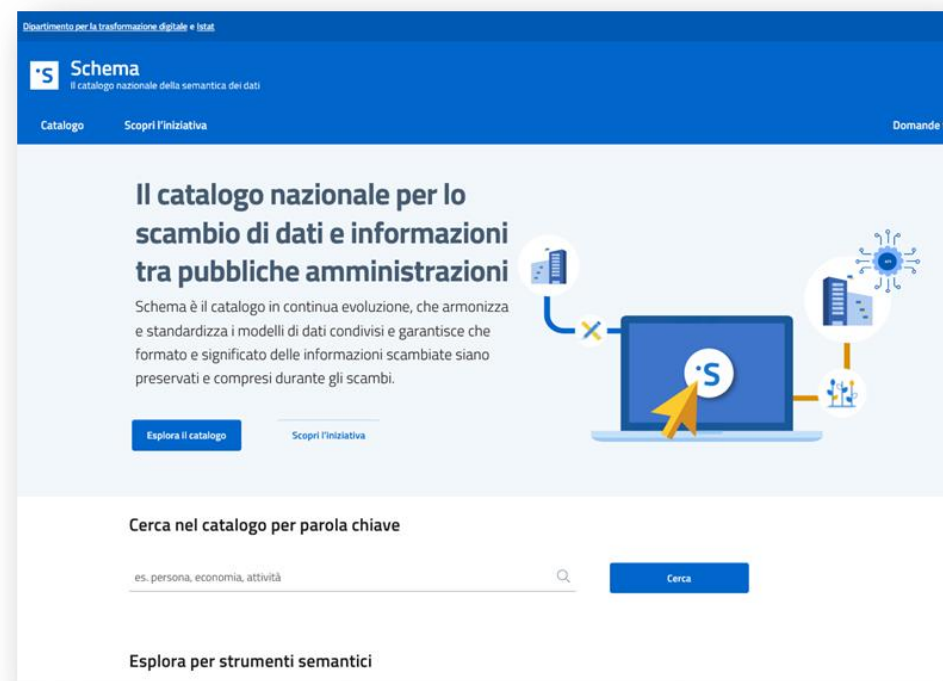
- Mostly as a backbone operational model
- JoinUp has extended the model for internal purposes
- Introduces notion of *collections*, *solutions*, *releases*



ADMS-AP: use case schema.gov.it

Italian collection of Semantic Assets:

- <https://w3id.org/italia/onto/ADMS>
- <https://schema.gov.it>



The screenshot shows the homepage of the Schema.gov.it website. The header is blue with the text "Dipartimento per la trasformazione digitale e Istat" and the "Schema" logo, which includes a stylized 'S' in a square. Below the logo, it says "Il catalogo nazionale della semantica dei dati". Navigation links for "Catalogo" and "Scopri l'iniziativa" are visible. The main content area features the title "Il catalogo nazionale per lo scambio di dati e informazioni tra pubbliche amministrazioni" and a descriptive paragraph: "Schema è il catalogo in continua evoluzione, che armonizza e standardizza i modelli di dati condivisi e garantisce che formato e significato delle informazioni scambiate siano preservati e compresi durante gli scambi." To the right of the text is an illustration of a laptop with a cursor pointing at it, surrounded by icons representing data exchange and public administration. Below the text are two buttons: "Esplora il catalogo" and "Scopri l'iniziativa". A search section titled "Cerca nel catalogo per parola chiave" contains a search input field with the placeholder text "es. persona, economia, attività" and a "Cerca" button. At the bottom, there is a link "Esplora per strumenti semantici".

ADMS-AP: open discussion

Question:

Are there any users in the call and can they share their use and which aspects of ADMS(-AP) is of their interest?

ADMS-AP: open discussion

Questions:

- Do you have the need to manage metadata of semantic assets?
- Do you have the need to manage other kinds of assets? Which one?



Wrap-up and next steps

Conclusion

- ADMS as broad vocabulary
 - Joined effort with W3C (Many thanks!)
 - SEMIC will take up the maintenance
- ADMS Controlled Vocabularies
 - Future maintenance by EU Vocabularies team
- ADMS-AP
 - No direct impact by above changes
 - Open future
 - Suggestions are welcome

New release ADMS



[GitHub](#)



Public review until 26 May 2023



Feedback on the ADMS vocabulary + ADMS Controlled Vocabularies

A network visualization on a dark blue background. A central node is highlighted in bright orange. From this central node, numerous lines radiate outwards, connecting to other nodes. The lines are colored in a gradient from orange near the center to green and then blue as they extend further. The overall shape is roughly star-like or fan-like, with many lines extending towards the edges of the frame.

Thank you



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