ASSESSMENT SUMMARY v1.0.0

Asset Description Metadata Schema (ADMS)[1]

W3C[2]

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[1] ADMS specification: https://www.w3.org/TR/vocab-adms/#introduction

[2] The developer organisation: https://www.w3.org/

Change Control

Modification	Details
Version 1.0.0	
Initial version	

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1. INTRODUCTION

The present document is a summary of the assessment of **ADMS** carried out by CAMSS using the CAMSS Assessment EIF scenario[3]. The purpose of this scenario is to assess the compliance of a standard or specification with the European Interoperability Framework (EIF)[4].

2. ASSESSMENT SUMMARY

ADMS is a profile of DCAT, used to describe semantic assets, defined as 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.

It is a specification used for describing and providing metadata about digital assets or resources, particularly within the realm of semantic web and linked data technologies.

ADMS is designed to provide a standardised way of describing assets such as datasets, vocabularies, ontologies, services, and software applications. It aims to facilitate the discovery, interoperability, and reuse of these digital assets by providing detailed metadata that describes their characteristics, usage, and dependencies.

2.1. EIF Interoperability Principles

Interoperability principles are fundamental behavioural aspects that drive interoperability actions. They are relevant to the process of establishing interoperable European public services. They describe the context in which European public services are designed and implemented.

The specification fully supports the principles setting context for EU actions on interoperability:

- **Subsidiarity and proportionality**
  ADMS is included in the national catalogue of Slovakia. The National Interoperability Framework (NIF) of these Member States is fully aligned with at least 2 out of 3 sections of the European Interoperability Framework (EIF) according to the National Interoperability Framework Observatory (NIFO) factsheets[5].

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[3] CAMSS Assessment EIF Scenario 6.0.0: https://ec.europa.eu/eusurvey/runner/CAMSSAssessmentEIFScenario6

[4] ISA[2] programme: https://ec.europa.eu/isa2/eif_en

[5] NIFO factsheets: https://joinup.ec.europa.eu/collection/nifo-national-interoperabilityframeworkobservatory/digital-public-administration-factsheets-2022

The specification fully supports the principles setting context for EU actions on interoperability:

- **Openness**

    ADMS is a vocabulary based on DCAT for the description of Assets, specifically interoperability solutions). In this sense, the ADMS helps the publication and reusability of solutions and their data.

    The specification is an RDF vocabulary for representing concepts of a repository, intended to facilitate the co-operation. By describing the assets, releases, and distributions of a repository, it fosters the publications of data and its discoverability. In fact, ADMS is the basis for the ADMS-AP used in Joinup[6] to describe the different reusable solutions and make them better discoverable and reusable across borders.

    The W3C Royalty-Free IPR licenses granted under the W3C Patent Policy[7] apply to all W3C specifications, including ADMS.

    The specification is currently implemented in several initiatives in the European public sector. This is a key point that reflects the market acceptance of the specification by the public administrations and institutions in Europe.

- **Transparency**

    By using ADMS to describe assets/solutions, the administrations ensure and enhance the visibility of these solutions and assets that are involved in the development of EU administrations' activity.

    ADMS provides a standardised method for describing assets and their distributions. Therefore, while providing a common way and components for the metadata provision, it helps the comprehensibility of data and services of Public administrations across borders.
    The specification does not directly help with the provision of application programming interfaces (APIs) or Web services. However, the specification allows to provide of a standardised description for assets in a repository. As well, it allows the discoverability of resources from a single access point

- **Reusability**

    Although ADMS was developed taking into account the perspective of the eGovernment System Development, it is a vocabulary that could be reused beyond this domain. It aims to ease the standardisation of assets description in assets repositories, to enhance the discoverability and reuse of assets and solutions.

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[6] ADMS-AP in Joinup: https://joinup.ec.europa.eu/collection/support-centre/solution/asset-description-metadata-schema-adms/release/20

[7] W3C Patent Policy: https://www.w3.org/Consortium/Patent-Policy-20200915/

- **Technological neutrality and data portability**
  Like other vocabularies, ADMS reuses components from other vocabularies. (e.g. foaf, dcat), and also the resource Description Framework (RDF). This causes a dependency that can hamper the interoperability in those cases where new releases of the reused vocabularies are not backward compatible. As the is specification is part of RDF, it can reuse partially core classes which can be implemented incrementally or separately to fulfill its function.

  As it happens with all Core Vocabularies, the ADMS specification can be extended for specific purposes on determined use cases, as it is a profile of DCAT.
  The specification supports the evolution of European Public Services by enhancing the discoverability and reuse of interoperability solutions.

The specification partially supports the principles related to generic user needs and expectations:

- **User-centricity**
  ADMS's purpose is the description of Assets within a Catalogue (repository), making them easy to discover and reuse. However, it is not related to foster the one-only principle between administrations and stakeholders

- **Inclusion and accessibility**
  The purpose of ADMS is not related to e-accessibility. Therefore, this criterion is not applicable to this specification.

- **Security and privacy**
  As a vocabulary to describe assets within a Repository, it provides concepts and properties identifying the content creators and other informative metadata such as dates involved in the release of the solutions described. These facts increase the reliability of the exchanged data.

- **Multilingualism**
  The purpose of ADMS is not related to the delivery of multilingual public services. Therefore, this criterion is not applicable to this specification.

The specification supports the foundation principles for cooperation among public administrations:

- **Administrative Simplification**
  ADMS as a profile of DCAT, is an RDF vocabulary for representing data catalogues that allows data owners to provide metadata about the datasets they publish. By describing catalogues, datasets and resources, a publisher makes them easily searchable and discoverable.

  Following the previous statement it can be said that ADMS can simplify the delivery of European public services.

- **Preservation of information**
Although ADMS's purpose is not the long-term preservations, it can be used to document and store semantic assets.

- **Assessment of effectiveness and efficiency**
There are assessments that evaluate the effectiveness and efficiency by evaluating digital solutions that involve the specification.

2.2. EIF Interoperability Layers

The interoperability model which is applicable to all digital public services includes:
- Four layers of interoperability: legal, organisational, semantic and technical;
- A cross-cutting component of the four layers, 'integrated public service governance';
- A background layer, 'interoperability governance'.

The Specification partially supports the implementation of digital public services complying with the EIF interoperability model:

- **Interoperability governance**
ADMS is associated with EIRA[8] ABBs in the EIRA Library of Specifications (ELIS)[9]. More specifically, it is associated with API Catalogue Component, API Discovery And Catalogue Service, Data Publication Component, Data Publication Service, Metadata Management Component, Metadata Management Service, Shared Platform from the Technical View, Controlled Vocabulary, Data, Data Model, Data Syntax, Forms Structure, Hash Code, Metadata, Ontology, Semantic Interoperability Agreement from Semantic View. The specification is recommended in Slovakia's national catalogue10.
As it is specified in the section 2 of the specification, it has defined conformance as a requirements to be followed.

- **Legal Interoperability**
ADMS is developed by W3C, a standard development organisation based in the US. Moreover, ADMS specification does not appear in any of the main European standard development bodies, therefore, the specification is not a European standard.

- **Organisational interoperability**

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[8] EIRA: https://joinup.ec.europa.eu/collection/european-interoperability-reference-architecture-eira/solution/eira/release/v500

[9] ELIS: https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-camss/solution/elis/elis-dashboard

10   Slovakia's   National   Catalogue: https://www.mirri.gov.sk/sekcie/informatizacia/governance-a-standardy/standardy-isvs/index.html

While it may not specifically facilitate the modelling of business processes, it can provide valuable information about the assets involved in business processes, such as data models, ontologies, vocabularies, and other related resources. These assets can be utilized in the modelling and implementation of business processes, but the ADMS specification itself is not designed explicitly for business process modelling.

- **Semantic Interoperability**
  As for all eGovernment-related Vocabularies, the SEMIC action from the ISA2 is the responsible for the maintenance and growth of the ADMS development, as well as the community around it.

3. ASSESSMENT RESULTS

This section presents an overview of the results of the CAMSS assessments for **ADMS**. The CAMSS "Strength" indicator measures the reliability of the assessment by calculating the number of answered (applicable) criteria. On the other hand, the number of favourable answers and the number of unfavourable ones is used to calculate the "Automated Score" per category and an "Overall Score".

Category	Automated Score	Assessment Strength	Compliance Level
Principle setting the context for EU actions on interoperability	100/100 (100%)	100%	Seamless
Core interoperability principles	15400/1700 (92%)	100%	Seamless
Principles related to generic user needs and expectations	980/1200 (88%)	50%	Seamless
Foundation principles for cooperation among public administrations	360/500 (88%)	100%	Sustainable
Interoperability layers*	880/1000 (67%)	90%	Seamless
Overall Score	3160/3800 (83%)[11]	84%	

The technical interoperability layer is covered by the criteria corresponding to the core interoperability principle ''Openness''.

With an 84% of assessment strength, this assessment can be considered representative of the specification compliance with the EIF principles and recommendations.

The Overall Automated Score of 83% (3160/3800) demonstrates that the specification supports the European Interoperability Framework in the domains where it applies.

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[11] See the "results interpretation" section of the CAMSS Assessment EIF Scenario Quick User Guide:

https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-camss/solution/camss-assessment-eif-scenario/results-visualisation-and-interpretation