



ASSESSMENT SUMMARY v1.0.0

Core Public Service Vocabulary Application Profile (CPSV-AP)¹

European Commission (SEMIC)²

¹ CPSV-AP: <u>https://joinup.ec.europa.eu/collection/semantic-interoperability-community-semic/solution/core-public-service-vocabulary-application-profile/release/22</u>

² The development organisation homepage: <u>https://joinup.ec.europa.eu/collection/semic-support-centre</u>

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 **CPSV-AP** carried out by CAMSS using the CAMSS Assessment EIF scenario³. 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

The CPSV-AP specification allows describing public services in a standardised human and machinereadable format. This fact fosters the discoverability of the datasets containing information about public services. It is supported by the Semantic Interoperability Community (SEMIC⁵).

One example of how CPSV-AP is used is in the context of the European Commission's Digital Single Market strategy, which aims to promote the development of a common digital market across the EU. CPSV-AP provides a standard way to describe these services, making it easier to publish and reuse public service information across different systems and organizations.

The specification was previously supported by ISA2 and SEMIC has taken over the coordination of the development and maintenance of CPSV-AP, ensuring that it remains up-to-date and meets the evolving needs of the EU public sector.

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 supports the principles setting context for EU actions on interoperability:

- Subsidiarity and proportionality

As of 2022, only one country has CPSV-AP included within its national catalogue, which is Belgium, and has a complying performance of 2 out of 3 sections of the EIF according to the NIFO factsheets⁶.

³ CAMSS Assessment EIF Scenario 6.0.0: <u>https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-camss/solution/camss-assessment-eif-scenario/release/600</u>

⁴ ISA² programme: <u>https://ec.europa.eu/isa2/eif_en</u>

⁵ SEMIC: <u>https://joinup.ec.europa.eu/collection/semic-support-centre/about</u>

⁶ NIFO Factsheets: <u>https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/digital-public-administration-factsheets-2022</u>

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

- Openness

CPSV-AP is compliant with Tim Berner's Lee's 5 star for open data. The specification allows describing public services in a standardised human and machine-readable format. This fact fosters the discoverability of the datasets containing information about public services. The specification is a RDF-base application profile. All the documentation on CPSV-AP releases is publicly available in Joinup7. The specification is maintained by the SEMIC Working Group, and the specification is available with any restrictions related to (F)RAND and it is licensed under the royalty-free basis for its implementation.

- Transparency

CPSV-AP is a reusable and extensible data model for harmonising the way public services are described in a machine-readable format. So, it describes the public administrations and eases their visualisation and comprehensibility.

The specification as it describes public administration services and procedures it allows to contribute to the exposure of interfaces if combined with other specifications.

- Reusability

The Core Public Service Vocabulary Application Profile is a business domain agnostic specification, fostering the specification's use in any domain. The specification is also independent of any software, hardware, or operating system. So, it can be said that the specification is independent of any specific technology or platform.

- Technological neutrality and data portability

The Core Public Service Vocabulary Application Profile is a business domain agnostic specification, fostering the specification's use in any domain. The specification is a RDF-base application profile. The specification makes use of optional classes that allow it to be more flexible towards the purpose it is working for. It is independent of any software, hardware, or operating system. So, it can be said that the specification is independent of any specific technology or platform. The specification makes use of optional classes that allow it to be more flexible towards the purpose it is working for. The specification is independent of any specific technology or platform. The specification makes use of optional classes that allow it to be more flexible towards the purpose it is working for. The specification allows the information to be searched and shared easily within and across public administrations all over Europe.

⁷ Joinup CPSV-AP Reference: https://joinup.ec.europa.eu/collection/semantic-interoperabilitycommunity-semic/solution/core-public-service-vocabulary-application-profile/release/22

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

- User-centricity

The application of the once-only principle in all EU Member States public administrations aims at reducing the administrative burden. This Core Vocabulary fosters interoperability between public administrations, cross border services and impacts positively the development of eGovernment.

- Inclusion and accessibility

The purpose of CPSV-AP is not related to e-accessibility. Therefore, this criterion is not applicable to this specification.

- Privacy

The purpose of this Core Vocabulary is not related to the privacy of the data exchange. Therefore, this criterion is not applicable to this specification.

- Security

CPSV-AP is designed to facilitate the access to public service information among other main goals of the specification.

- Multilingualism

The purpose of CPSV-AP is related to the delivery of multilingual public services. All datatype properties with datatype "text" where the value for that property may exist in multiple languages, the property has multiple instances which are tagged with a language identifier for each language in which the value for that property exists.

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

- Administrative Simplification

The purpose of the specification is to facilitate the exchange of structured data. By allowing to make the data available to other persons or organisations, this Core Vocabulary reduces the administrative burden and enables digital service delivery channels.

- Preservation of information

The purpose of this Core Vocabulary is not related to enabling long-term preservation of data/information. Therefore, this criterion is not applicable to this specification.

- Assessment of effectiveness and efficiency

There have been found some assessments directly addressing CPSV-AP effectiveness and efficiency. There are two examples: the first one_⁸ of CPSV-AP being evaluated for comprehensiveness and compliance with EU policies, and the one⁹, a study on the use of CPSV-AP to publish public service descriptions as linked open data.

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

- Interoperability governance

Core Public Service Vocabulary Application Profile 2.2 was already associated to an EIRA¹⁰ ABBs in the EIRA Library of Specifications (ELIS)¹¹, and so it is the new release (v.3.1.0) of the specification in 2023. Specifically, this Core Vocabulary covers Digital Public service Catalogue from the Organisational View, Controlled Vocabulary, Data, Data Model, Data Syntax, Forms Structure, Hash Code and Metadata from the Semantic View and API Discovery and Catalogue Service from the Technical View. The specification's version 2.2 defined a series of conformance status that CPSV-AP needs in order to be conform, as the latest release, 3.1, is based on the previous work of 2.2 it can be said that the specification defines conformance.

Legal Interoperability

CPSV-AP is a European Standard as it was developed and recognized by the European standards organisations; it is also maintained by the EU community.

- Organisational interoperability

CPSV-AP is a reusable and extensible data model for harmonising the way public services are described in a machine-readable format. So, it describes the public administrations and eases their visualisation and comprehensibility. An example to clarify this past point is the CPSV-AP

⁸ Public Service Models: A Systematic Literature Review and Synthesis: <u>https://ieeexplore.ieee.org/abstract/document/8823991</u>

⁹ Using CPSV-AP to publish public service descriptions as linked open data: <u>https://link.springer.com/article/10.1007/s11761-022-00344-6</u>

¹⁰ EIRA: <u>https://joinup.ec.europa.eu/collection/european-interoperability-reference-architecture-</u> <u>eira/solution/eira/release/v500</u>

¹¹ ELIS: <u>https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-</u> <u>camss/solution/elis/elis-dashboard</u>

Mapping Editor¹², which allows European public administrations to create mappings for harmonising the different data models used to describe public services, either within a country or across borders.

- Semantic Interoperability

As it happens with all the e-Government Vocabularies, it has the SEMIC¹³ action from the ISA2 as responsible for the maintenance and growth of the development and the community around it.

¹² CPSV-AP Mapping Editor Reference: <u>https://joinup.ec.europa.eu/collection/semantic-interoperability-</u> <u>community-semic/solution/cpsv-ap-mapping-editor</u>

¹³ SEMIC Reference: <u>https://joinup.ec.europa.eu/collection/semantic-interoperability-community-semic/about</u>

3. Assessment Results

This section presents an overview of the results of the CAMSS assessments for **CPSV-AP**. 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	1560/1700 (92%)	100%	Seamless
Principles related to generic user needs and expectations	1160/1200 (97%)	25%	Seamless
Foundation principles for cooperation among public administrations	500/500 (100%)	80%	Seamless
Interoperability layers*	960/1100 (96%)	100%	Seamless
Overall Score	3280/3500 (94%) ¹⁴	78%	

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

With an 78% of assessment strength, this assessment can be considered representative of the specification compliance with the EIF principles and recommendations.

The Overall Automated Score of 94% (3280/3500) demonstrates that the specification supports the European Interoperability Framework in the domains where it applies.

¹⁴ See the "results interpretation" section of the CAMSS Assessment EIF Scenario Quick User Guide:

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