



# CAMSS ASSESSMENT SUMMARY v1.0.0

[The Dublin Core Ontology](#)<sup>1</sup> (DCMI)

DCMI & ASSIST&T

---

<sup>1</sup> The Dublin Core Ontology: [DCMI: Home \(dublincore.org\)](https://dublincore.org/)

# Change Control

Modification		Details
Version 1.0.0		
Initial version		

## TABLE OF CONTENT

<b>1. INTRODUCTION.....</b>	<b>4</b>
<b>2. ASSESSMENT SUMMARY .....</b>	<b>4</b>
2.1. EIF Interoperability Principles.....	4
2.2. EIF Interoperability Layers .....	6
<b>3. ASSESSMENT RESULTS .....</b>	<b>8</b>

## 1. INTRODUCTION

The present document is a summary of the assessment of **The Dublin Core Ontology** carried out by CAMSS using the CAMSS Assessment EIF scenario<sup>2</sup>. The purpose of this scenario is to assess the compliance of a standard or specification with the European Interoperability Framework (EIF)<sup>3</sup>.

## 2. ASSESSMENT SUMMARY

**The Dublin Core Ontology**, also known as the Dublin Core terms or DCMI, covers all the Dublin Core Metadata Initiative (DCMI) terms and their property relations in combination with extension vocabularies (DCAM).

### 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 does not support the principles setting context for EU actions on interoperability:***

- **Subsidiarity and proportionality**

The specification has been found included in three Member States National catalogue: Slovenia, Ireland and Cyprus even though the National Interoperability Framework Observatory (NIFO)<sup>4</sup> is not fully compliant with the EIF. All three countries that the specification has been found in, comply with middle-upper performance than stated in the Digital Public Administration Factsheets.

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

- **Openness**

The Dublin Core element set defines a set of metadata elements for cataloguing library items and other electronic resources. Such items are known as “resources”, and there exist certain relationships (Dublin Core calls these relationships “elements”) between resources and other resources or data. Moreover, the specification’s schema is in RDF, which is one of the conditions to be linked open data. The specification also follows an Open Consensus Building, participation in the DCMI community is open to all interested groups or individuals with expertise or interests in metadata.

---

<sup>2</sup> EIF Scenario: [https://ec.europa.eu/eusurvey/runner/EIFScenario\\_v510](https://ec.europa.eu/eusurvey/runner/EIFScenario_v510)

<sup>3</sup> EIF: [https://ec.europa.eu/isa2/eif\\_en](https://ec.europa.eu/isa2/eif_en)

<sup>4</sup> NIFO factsheets: <https://joinup.ec.europa.eu/collection/national-interoperability-framework-observatory-nifo/nifo-factsheets>

After research, nothing related to licensing on a royalty-free basis has been found.

The specification has had 14 previous releases which are indicative of sufficient maturity for its use and demonstrate it has overcome possible difficulties.

- **Transparency**

The Dublin Core is not related to enabling the visibility of administrations, although it can enable visibility of administrations if it is combined with other specifications, the [ECLI](#)<sup>5</sup> report is a good example, where ECLI is based on the Dublin Core terms and eases interoperability in search practices within case law.

The specification and its community also ensure to give conferences based on metadata as well as maintaining and developing metadata terms namespaces.

- **Reusability**

The Dublin Core Ontology is a business domain agnostic specification and therefore can be used and implemented in any business domain.

- **Technological neutrality and data portability**

The specification is platform agnostic as it is agnostic enough to work in any search engine, referring to as a program that searches for and identifies terms in a database that correspond to keywords or characters specified by the user. The specification is not technology agnostic though, relies on some ISO standards, for example, the Syntax Encoding Schemes, rely among others, on [ISO3166](#)<sup>6</sup>

There are some general implementation guidelines that a user must follow to implement the specification. Fortunately, the implementation does allow customisation in the implementation guidelines, making use of the XML customisation options.

- **User-centricity**

As a mark-up language that describes resources on the web, the specification may increase government-to-government reuse of data and therefore can prevent citizens or businesses from providing information multiple times; however, this is not consistently done.

- **Inclusion and accessibility**

The specification has an application profile that addresses e-accessibility, supported by the DCMI Accessibility Community, which main focus is to ensure that DC metadata users can describe resources and services in a way that will increase the accessibility of information for everyone.

- **Security and privacy**

The specification has a namespace aiming to know information about who accesses the resource or provides an indication of its security status, the namespace may include information regarding access or restrictions based on privacy, security or other policies. The specification also ensures and enables the secure processing of data.

---

<sup>5</sup> European Case Law Identifier (ECLI): [European e-Justice Portal - European Case Law Identifier \(ECLI\) \(europa.eu\)](#)

<sup>6</sup> ISO 3166 Definition: [ISO - ISO 3166 — Country Codes](#)

- **Multilingualism**

The specification's namespaces terms make sure to identify the language they are working with, but it does not say anything about any multilingual context.

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

- **Administrative Simplification**

The Dublin Core Ontology may enable digital service delivery channels as European Legislation Identifier (ELI) is using DCMI in some of its use cases, increasing access to legislative documents.

- **Preservation of information**

A Dublin Core related group oriented to the preservation, but their goals and records were not available.

- **Assessment of effectiveness and efficiency**

As the specification is being implemented by, as an example ECLI, it can be a sign of the specification's effectiveness and efficiency, if used together with other specifications.

## **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**

The Dublin Core Ontology specification is mapped to Ontology ABB Semantic Layer. Even though DCMI does not include a definition of conformance, the Dublin Core Application Profiles may include documentation on constraints meaning that implementors can elaborate their conformance test.

The specification is used by some Member States such as Slovenia, Ireland and Cyprus, proving that it is valid enough to be recommended.

- **Legal Interoperability**

Various standard catalogues at supra-national level have been checked, and there has been no evidence of the Dublin Core Ontology as a European standard.

- **Organisational Interoperability**

With all the missions DCMI carries it can be seen that it can facilitate the business processes, with the development and curation of metadata terms namespaces and other duties it carries.

The specification has four defined interoperability levels that serve as guidelines for determining the level of interoperability, having defined a level means that the previous levels to that one are included. The intention is to provide a “ladder of interoperability”, specifying the choices, costs, and benefits involved in designing applications for increased levels of interoperability.

- **Semantic Interoperability**

The specification has a dedicated community that shares and develops it, as well as a dedicated Github space for sharing results and best practices. Therefore, the Dublin Core Ontology encourages the creation of open information about the specification and encourages relevant communities from the EU to share their results.

### 3. ASSESSMENT RESULTS

This section presents an overview of the results of the CAMSS assessments for **The Dublin Core Ontology**. 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
EIF Principle setting the context for EU actions on interoperability	80/100 (80%)	100%	Sustainable
Core interoperability principles	1980/2200 (90%)	81%	Seamless
Principles related to generic user needs and expectations	240/500 (48%)	100%	Essential
Foundation principles for cooperation among public administrations	420/500 (84%)	100%	Seamless
Interoperability layers*	800/1100 (72%)	100%	Sustainable
Overall Score	3120/4000 (78%) <sup>7</sup>	96%	

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

With a 96% of assessment strength, this assessment can be considered representative of the specification compliance with the EIF principles and recommendations.

The Overall Automated Score of 78% (3120/4000) demonstrates that the specification supports the European Interoperability Framework in the domains where it applies.

---

<sup>7</sup> 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>