ASSESSMENT SUMMARY v1.0.0

Cascading Style Sheets 2.1[1]

World Wide Web Consortium (W3C)[2]

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[1] https://www.w3.org/TR/2011/REC-CSS2-20110607/

[2] 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 the **Cascading Style Sheets 2.1** carried out by CAMSS using the CAMSS EIF assessment scenario. The purpose of this scenario is assessing the compliance of a standard or specification with the European Interoperability Framework (EIF)[3].

2. ASSESSMENT SUMMARY

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a web document written in HTML (layout, colours and fonts). CSS 2.1 is included language developed and maintained by the **World Wide Web Consortium (W3C)**.

2.1. 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**
  CSS2 2.1 is included in 3 national catalogues of recommended specifications. The National Interoperability Framework (NIF) of these Member States is fully aligned with at least 4 out of 5 sections of the European Interoperability Framework (EIF) according to the National Interoperability Framework Observatory (NIFO)[4] factsheets.

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

- **Openness**
  CSS 2.1 is an open specification publicly available for study or use. In W3C, all the stakeholders have the opportunity for the development and approval process of the specification as a recommended standard. However, CSS is not implemented for the exchange of data. It is mature enough for the development of products and services but nowadays it does not have sufficient market acceptance because there is a newer and better version. So that, it is not considered a good specification for the creation of innovative solutions. Nevertheless, CSS 2.1 is a Royalty-Free specification.

- **Transparency**
  CSS 2.1 fosters the visibility and comprehensibility of administrative rules, processes, data, services and decision-making of a public administration. However, the purpose of the CSS is not related to the availability interfaces.

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[3] https://ec.europa.eu/isa2/eif_en

[4] https://joinup.ec.europa.eu/collection/national-interoperability-framework-observatory-nifo/nifo-factsheets

- **Reusability**
  CSS 2.1 has been made available for its reuse by the by W3C and is a business agnostic specification.

- **Technological neutrality and data portability**
  CSS 2.1 is dependent on HTML, by itself, it does not represent anything. However, it is proportionate to the need of users but it is not related to data portability.

The specification does not support the principles related to generic user needs and expectations:

- **User-centricity**
  CSS 2.1 does not foster user-centricity. Therefore, the specification is not fostering the implementation of the once-only principle.

- **Inclusion and accessibility**
  CSS 2.1 by providing styles enhancing the visualisation of the represented data. The specification helps the accessibility of disabled persons in terms of information visualisation and providing support to access to web functionalities.

- **Security and privacy**
  CSS 2.1 does not foster security and privacy. The purpose of the specification is not related to the security and privacy of the data exchange.

- **Multilingualism**
  CSS 2.1 does not foster the delivery of multilingual European public services. The purpose of the specification is not related to multilingualism.

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

- **Administrative Simplification**
  CSS 2.1 can be used to design website and the representation of the content easing and fostering the provision of digital services instead of work with non-digital processes and information.

- **Preservation of information**
  CSS 2.1 does not foster the long-term preservation of electronic records and other kinds of information. The purpose of the specification is not related to the preservation of information.

- **Assessment of effectiveness and efficiency**
  There are existing documentation and studies assessing the effectiveness and efficiency of CSS 2.1. It is a comparison between 3 versions, CSS, CSS2, and CSS3. As well, the study shows the improvement of the different versions over time as resulting in more efficient and faster web designs.

2.2. 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**
  Eight Member States are recommending CSS 2.1 in their ICT National Catalogues. Additionally, CSS is already associated with the European Interoperability Reference Architecture (EIRA) ABBs in the European Library of Specifications (ELIS). However, CSS 2.1 has not been used in any EU cross-border projects. Moreover, it is not included in a catalogue of standards at EU level.

- **Integrated public service governance & Legal Interoperability**
  CSS is currently being used in the cross-border gateway to EU Law, EUR-Lex. It is used for the representation of the different document types (HTML and XHTML) contained within EUR-Lex. However, no explicit agreement has been found involving the usage of CSS for the European Public Service Provision.

- **Organisational interoperability**
  CSS 2.1 is not a business process modelling standard or specification and does not define organisational interoperability aspects.

- **Semantic Interoperability**
  CSS 2.1 does not support semantic interoperability as is aimed to provide style to HTML documents.

- **Technical interoperability**
  This technical interoperability layer is covered by the core interoperability principle ''Openness''.

3. ASSESSMENT RESULTS

This section presents an overview of the results of the CAMSS assessments for **CSS 2.1**. 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 are used to calculate the "Automated Score" per category and an "Overall Score".

Category	Automated Score	Assessment Strength	# Favourable	# Unfavourable	# Not Applicable
Principle setting the context for EU actions on interoperability	100%	100%	1	0	0
Core interoperability principles	76%	89%	13	4	2
Principles related to generic user needs and expectations	100%	25%	1	0	3
Foundation principles for cooperation among public administrations	100%	67%	2	0	1
Interoperability layers*	60%	91%	12	8	2
Overall Score	71%	79%	22	9	8

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

With a 79% of assessment strength, this assessment can be considered representative of the specification compliance with the EIF principles and recommendations.

The Overall Automated Score of 71% demonstrates that the specification supports the European Interoperability Framework in the domains where it applies.
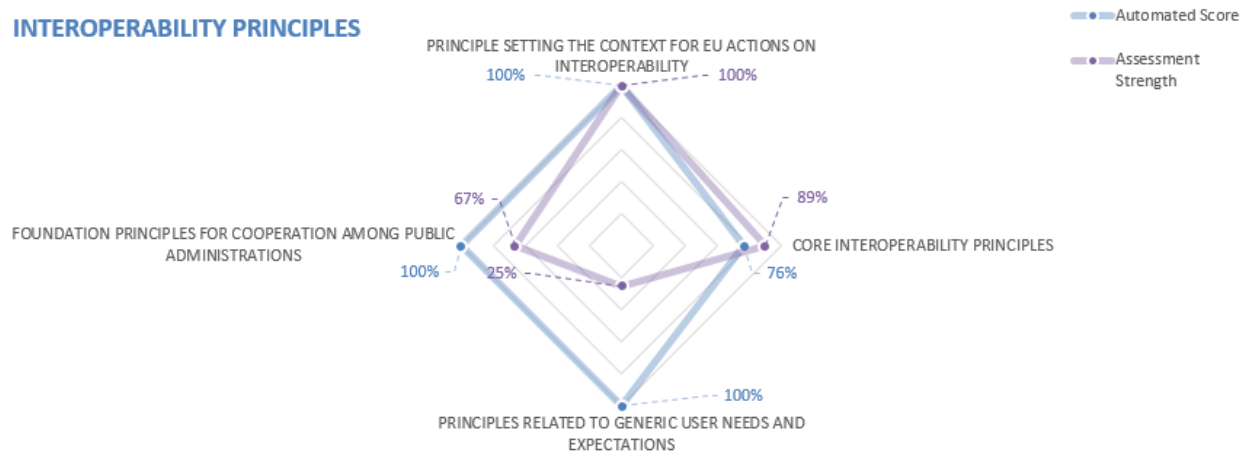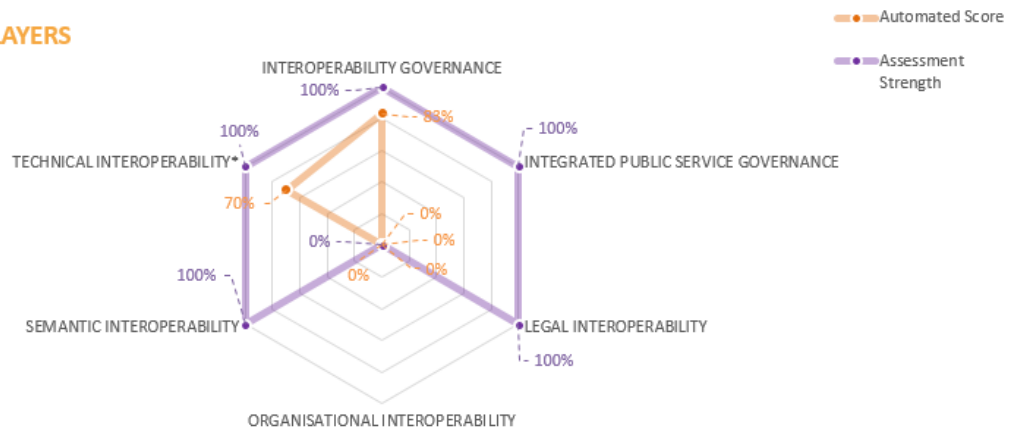

Figure 1. Interoperability principles Results

INTEROPERABILITY LAYERS

Figure 2. Interoperability layers Results