09 April 2025

# Introduction to the Interoperability Assessment Vocabulary

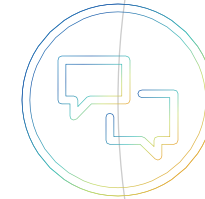DIGIT - Interoperability.

# Workshop practicalities

**Audio**

Click on 'connect audio' but please mute your microphones

**Chat**

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

**Recording**

The workshop will be recorded

# Objectives of this webinar

**01** Explore a draft data model for IOP Assessments

What does it contain? How does it relate to the Act?

**02** Gauge your interest to contribute

The model is a first iteration.. Your needs and context are paramount to achieving a mature specification.

**03** Timeline and planning

How will the model be developed? How will the Commission implement and support it?

# Introduction to SEMIC

The objectives of the SEMIC action are to promote Semantic Interoperability amongst the EU Member States by:

- Promoting the 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.

- Creating Semantic Interoperability through consensus

Context of the Interoperability Assessment data model

# Why a common data model?

## Interoperable Europe Act: Article 3

3) Union entities and public sector bodies may decide which body is to provide the necessary support to carry out the interoperability assessment. ==The Commission shall provide technical tools to support the interoperability assessment, including an online tool to facilitate the completion of the report and its publication on the Interoperable Europe portal== referred to in Article 8

## Interoperable Europe Act: Article 8

1) The solutions accessible through the Interoperable Europe portal shall:

- have a high-level of alignment with the Interoperable Europe solutions, which may be proven by ==publishing the outcome of the interoperability assessment== referred to in Article 3 and in the Annex;

4) Where a Union entity or public sector body provides a portal, catalogue or repository with similar functions, it shall take ==the necessary and proportionate measures to ensure interoperability with the Interoperable Europe portal==. Where such portals collect open source solutions, they shall allow for the use of the European Union Public Licence.

# What shall be in an Assessment?

## Interoperable Europe Act: Article 3

2) An interoperability assessment shall, in an appropriate, identify and assess the following:

a)  the effects of the binding requirements on cross-border interoperability, using the European Interoperability Framework referred to in Article 6as a support tool;

b)  the stakeholders to which the binding requirements are relevant;

c)  the Interoperable Europe solutions referred to in Article 7 that support the implementation of the binding requirements.

The Union entity or public sector body concerned shall publish, in a ==machine-readable format== facilitating automated translation, a report presenting the outcome of the interoperability assessment, including the items listed in the Annex, ==on an official website==. ==It shall share that report electronically== with the Interoperable Europe Board established pursuant to Article 15 (the 'Board').

## Interoperable Europe Act: Annex

1.  General Information
    1.  Union entity or public sector body providing the report and other relevant information
    2.  Initiative, project or action concerned
2.  Requirements
    1.  Trans-European digital public services concerned
    2.  Binding requirements assessed
    3.  Public and private stakeholders affected
    4.  Identified effects on cross-border interoperability

3.  Results
    1.  Interoperable Europe solutions identified for use
    2.  Other relevant interoperability solutions, where applicable, including machine-to-machine interfaces
    3.  Remaining barriers to cross-border interoperability

# Portal support

The Commission shall provide technical tools to support the interoperability assessment, including an online tool to facilitate the completion of the report and its publication on the Interoperable Europe portal

> A form to manually facilitate the completion and publication of Assessments

> An API to programmatically facilitate the completion and publication of Assessments

> A Common data model to support the above and to facilitate Semantic interoperability

# Interoperability Assessment Form

**Hosted on the Interoperable Europe Portal formerly known as Joinup**

## Online form for Assessments

| 1. General information | 2. Binding requirements | 3. Results | 4. Supporting documents | Submission review | Complete |

This section collects general information on your interoperability assessment.

### Union entity or public sector body which is providing the report.

Type of public sector body *

| Local public sector body ⌄ |

Select your country *

| Belgium ⌄ |

Name of your organisation *

| |

# Introduction to the IOPA data model

# IOP Assessment's business model

# IOP Assessment's data model
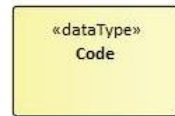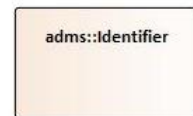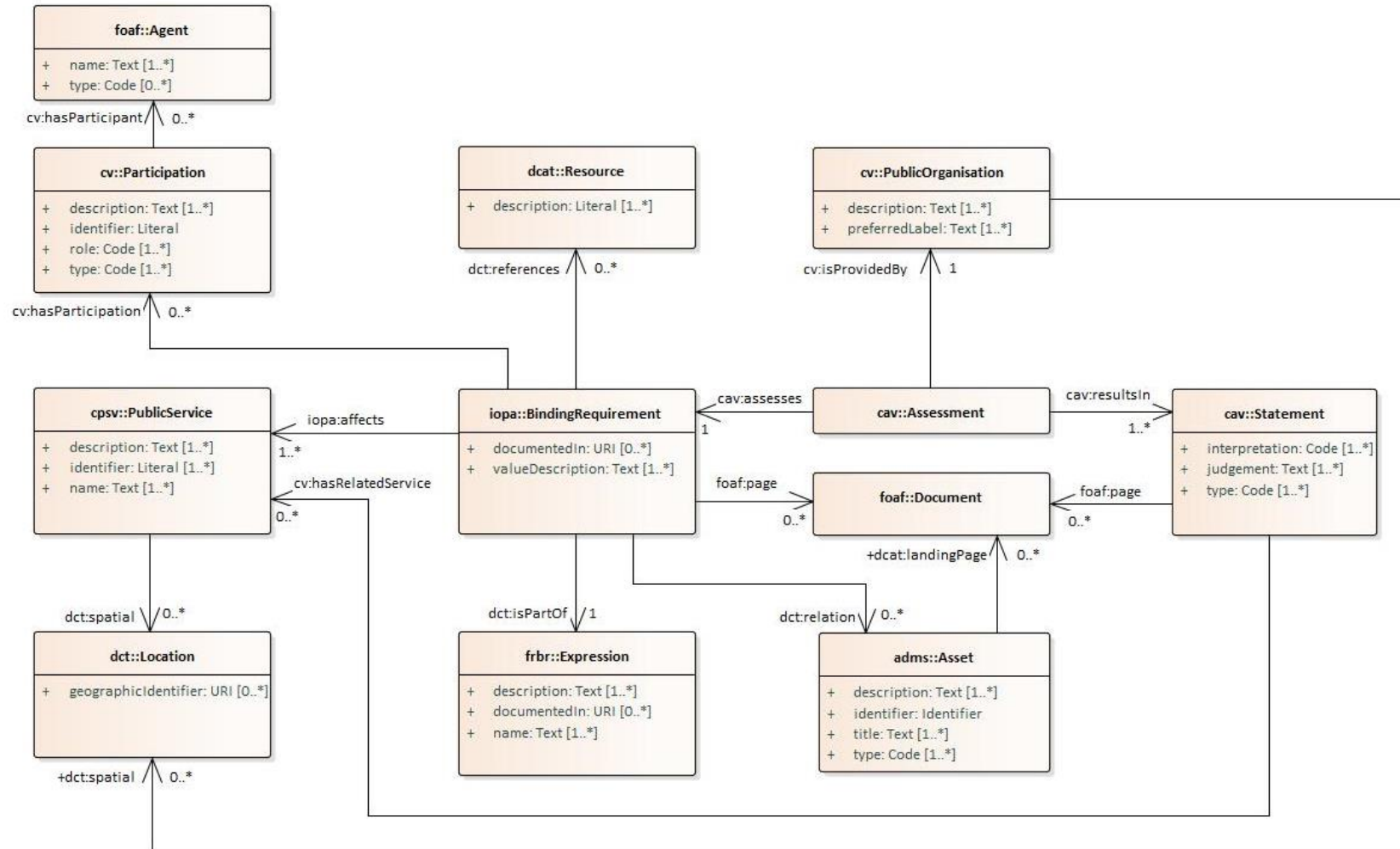
# IOP Assessment's questionnaire overview

| General information |
|---|

| Entity or public sector body |
|---|
| **cv::PublicOrganisation** |
| Type/Name<br>Country |

| Initiative, project or action concerned |
|---|
| **frbr::Expression** |
| Name<br>Link |

| Link to previous assessments |
|---|
| **cav::Assessment** |
| Link |

| Binding Requirements |
|---|

| Digital public service(s) concerned |
|---|
| **cpsv::PublicService** |
| Number<br>Function |

| Binding requirements assessed |
|---|
| **cav::BindingRequirement** |
| Legal reference<br>Short description<br>Affects |

| Public and/or private stakeholders affected |
|---|
| **cv::Participation** |
| Related group<br>Country |

| Effects on cross-border interoperability |
|---|
| **cav::Statement** |
| Legal<br>Organisational<br>Technical<br>Semantic |

| Results |
|---|

| Internal Solutions in the Portal |
|---|
| **adms::Asset** |
| Link |

| External Solutions to the Portal |
|---|
| **adms::Asset** |
| Name<br>Link |

| Barriers to cross-border interoperability |
|---|
| **cav::Statement** |
| Yes/No<br>Text |

**[*Link: "Assessment form Data model"](#)**

# IOP Assessment's questionnaire – link with regulation

## Online form for Assessments

| 1. General information | 2. Binding requirements | 3. Results | 4. Sup |

This section collects general information on your interoperability assessment.

### Union entity or public sector body which is providing the report.

Type of public sector body *

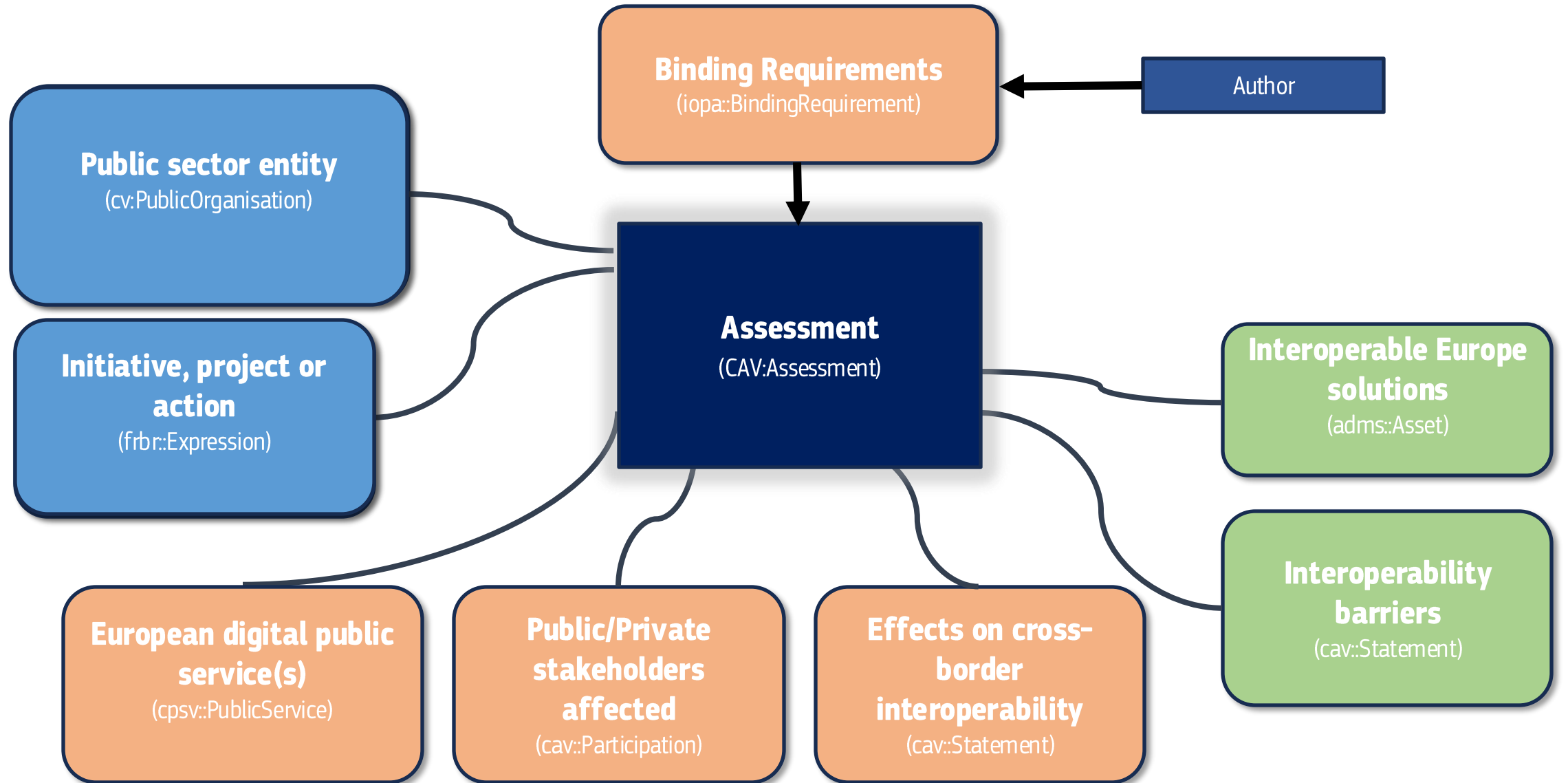Local public sector body

Select your country *

Belgium

Name of your organisation *

| Public Organisation | |
|---|---|
| URI | cv::PublicOrgnanisation |
| Definition | An Organization that is defined as being part of the public sector by a legal framework at any level. |
| Fields | •Name of organisation<br>•Public Sector Body type<br>•Country (list provided by http://publications.europa.eu/resource/authority/atu-type) |

The Union entity or public sector body concerned shall publish, in a machine-readable format facilitating automated translation, a report presenting the outcome of the interoperability assessment, including the items listed in the Annex, on an official website. It shall share that report electronically with the Interoperable Europe Board established pursuant to Article 15 (the 'Board'). The requirements laid down in this paragraph shall not restrict existing Member States' rules on access to documents. The publication of that report shall not compromise intellectual property rights or trade secrets, public order or security.

**ANNEX**

**COMMON CHECKLIST FOR INTEROPERABILITY ASSESSMENT**

The following items shall be included in the report referred to in Article 3(2):

1. General Information
   — Union entity or public sector body providing the report and other relevant information
   — Initiative, project or action concerned

2. Requirements

# IOP Assessment's questionnaire – link with regulation

## Initiative, project or action concerned (containing the binding requirements to be assessed)

Provide the name of the initiative, project or action containing the binding requirements to be assessed: *

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|
```

If applicable, provide a link to the initiative, project or action concerned:

Can this assessment be linked to previous assessments or related assessments at EU or national level? *

○ Yes
○ No

| Legal expression | |
|---|---|
| URI | frbr::Expression |
| Definition | A realization of a single work usually in a physical form. |
| Fields | •Label/title<br>•URI link to the Initiative, Project or Action<br>•Reference to requirement |

| Assessments | |
|---|---|
| URI | cav::Assessment |
| Definition | The intellectual work to evaluate an asset against the criteria of a given scenario |
| Fields | •Label/title<br>•Link |

### ANNEX

#### COMMON CHECKLIST FOR INTEROPERABILITY ASSESSMENT REPORTS

The following items shall be included in the report referred to in Article 3(2):

1. General Information
   — Union entity or public sector body providing the report and other relevant information
   — Initiative, project or action concerned

2. Requirements
   — Trans-European digital public services concerned
   — Binding requirements assessed
   — Public and private stakeholders affected
   — Identified effects on cross-border interoperability

# IOP Assessment's questionnaire – link with regulation

## Trans-European digital public service(s) concerned

Services are to be considered trans-European digital public services when they fulfil the cumulative re

'Digital services provided by Union entities or public sector bodies to one another or to natural or legal p
Union entities or between Union entities and public sector bodies, by means of their network and inform

**The binding requirements identified concern:**

○ Limited trans-European digital public services (1-5 specific TEDP services)

○ Potentially many trans-European digital public services (6 or more TEDP services)

**Specify the concerned function of trans-European digital public service(s): ***

☐ Defense
☐ Economic affairs
☐ Education
☐ Environmental Protection
☐ General public services
☐ Health
☐ Housing and Community Amenities
☐ Public Order and Safety
☐ Recreation, Culture, and Religion
☐ Social Protection

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**ANNEX**

**COMMON CHECKLIST FOR INTEROPERABILITY ASSESSMENT REPORT**

The following items shall be included in the report referred to in Article 3(2):

1. General Information
   — Union entity or public sector body providing the report and other relevant information
   — Initiative, project or action concerned
2. Requirements
   — Trans-European digital public services concerned
   — Binding requirements assessed

---

The Union entity or public sector body concerned may also carry out the interoperability assessment in other cases.

2. An interoperability assessment shall, in an appropriate manner, identify and assess the following:

(a) the effects of the binding requirements on cross-border interoperability, using the European Interoperability Framework referred to in Article 6as a support tool;

(b) the stakeholders to which the binding requirements are relevant;

(c) the Interoperable Europe solutions referred to in Article 7 that support the implementation of the binding requirements.

---

| Public services | |
|---|---|
| URI | cpsv::PublicService |
| Definition | A Public Service is a mandatory or discretionary set of activities performed, or able to be performed, by or on behalf of a public organisation, publicly funded and arise from public policy. |
| Fields | •Label/title<br>•Concerned function |

# IOP Assessment's questionnaire – link with regulation

## Identification of binding requirements assessed

List the binding requirement(s) assessed.

| Nr. | Provide a legal reference for the binding requirement, if available | Provide a short description or a title for the binding requirements for the purpose of referring back to the specific requirement in the assessment process | Binding requirement affects (select all relevant) |
|---|---|---|---|
| Number each requirement | | | ☐ Data<br>☐ Systems<br>☐ Other... |

The Union entity or public sector body concerned may also carry out the interoperability assessment in other cases.

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(b) the s

(c) the b

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   — Binding requirements assessed
   — Public and private stakeholders affected
   — Identified effects on cross-border interoperability

| Binding Requirement | |
|---|---|
| URI | iopa:BindingRequirement |
| Definition | An obligation, prohibition, condition, criterion or limit of a legal, organisational, semantic or technical nature, which is set by a Union entity or a public sector body concerning one or more trans-European digital public services and which has an effect on cross-border interoperability. |
| Fields | •Label/title<br>•links to external documentation<br>•Description: free text<br>•Solution: Joinup solutions<br>•External solutionPublic/Private<br>•stakeholders affected: cv::Participation |

# IOP Assessment's questionnaire – link with regulation

## Public and/or private stakeholders affected

**Select the groups of stakeholders to which binding requirement(s) are relevant:**

- ☐ Local public sector body
- ☐ Regional public sector body
- ☐ National public sector body
- ☐ European Union institution
- ☐ European Union agency
- ☐ European Union body
- ☐ Private Businesses

Select the stakeholder's country

Choose a country

| - None - |

| Public/Private Stakeholder | |
|---|---|
| URI | cv::Participation |
| Definition | The Participation class allows to define roles within a certain context. |
| Fields | •Title<br>•Group of stakeholders |

The Union entity or public sector body concerned may also carry out the interoperability assessment in other cases.

2. An interoperability assessment shall, in an appropriate manner, identify and assess the following:

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— Initiative, project or action concerned

. Requirements

— Trans-European digital public services concerned

— Binding requirements assessed

— Public and private stakeholders affected

— Identified effects on cross-border interoperability

# IOP Assessment's questionnaire – link with regulation

## Identified effects on cross-border interoperability

The Interoperable Europe Act requires the identification of effects on cross-border interoperability, i.e. public services that exchange data across borders.

Taking the EIF as the main starting point for your assessment means considering the extent to which whether additional requirements are needed. As explained above, it is necessary to keep in mind that **it should help detect ways towards *more* interoperability.**

Please tick the most appropriate and provide a brief description.

### Identified effects on cross-border legal interoperability

| Tick the most appropriate | Provide a justification |
|---|---|
| ○ Beneficial<br>○ Negligible<br>○ Risky | |

### Identified effects on cross-border organisational interoperability

| Tick the most appropriate | Provide a justification |
|---|---|
| ○ Beneficial<br>○ Negligible<br>○ Risky | |

| Identified effects on cross-border interoperability | |
|---|---|
| URI | cav::Statement |
| Definition | A value judgement, resulting from the assessment, pertinent to its entirety or to one or more of its specific parts. |
| Fields | •Title<br>•Cross border interoperability type<br>•Identification & Justification |

The Union entity or public sector body concerned may also carry out the interoperability assessment in other cases.

2. An interoperability assessment shall, in an appropriate manner, identify and assess the following:

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(b) the stakeholders to which the binding requirements are relevant;

(c) th

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2. Requirements
   — Trans-European digital public services concerned
   — Binding requirements assessed
   — Public and private stakeholders affected
   — Identified effects on cross-border interoperability

# IOP Assessment's questionnaire – link with regulation

Other relevant interoperability solutions, where applicable, including machine-to-machine interfaces

Identify the interoperability solutions mandatory to use for the implementation of the assessed binding requirement:

Internal Solutions in the Portal

Add | 1 more items

Solutions not in the Portal (link)

Link Title

Link URL

Add | 1 more items

| Relevant interoperability solutions | |
|---|---|
| URI | adms::Asset |
| Definition | 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). |
| Fields | •Label/title<br>•identifier |

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   — Public and private stakeholders affected
   — Identified effects on cross-border interoperability

3. Results
   — Interoperable Europe solutions identified for use
   — Other relevant interoperability solutions, where applicable, including machine-to-machine interfaces
   — Remaining barriers to cross-border interoperability

# IOP Assessment's questionnaire – link with regulation

## Remaining barriers to cross-border interoperability

**Have you discovered any remaining barriers to cross-border interoperability?** *

- ● Yes
- ○ No

Remaining barriers

| Statement | |
|---|---|
| URI | cav:Statement |
| Definition | A value judgement, resulting from the assessment, pertinent to its entirety or to one or more of its specific parts. |
| Fields | •Yes/No<br>•Description of barriers |

**ANNEX**

**COMMON CHECKLIST FOR INTEROPERABILITY ASSESSMENT REPORTS**

The following items shall be included in the report referred to in Article 3(2):

3. Results
   — Interoperable Europe solutions identified for use
   — Other relevant interoperability solutions, where applicable, including machine-to-machine interfaces
   — Remaining barriers to cross-border interoperability

# Current version of the Interoperability Assessment data model
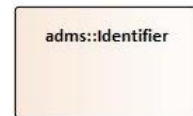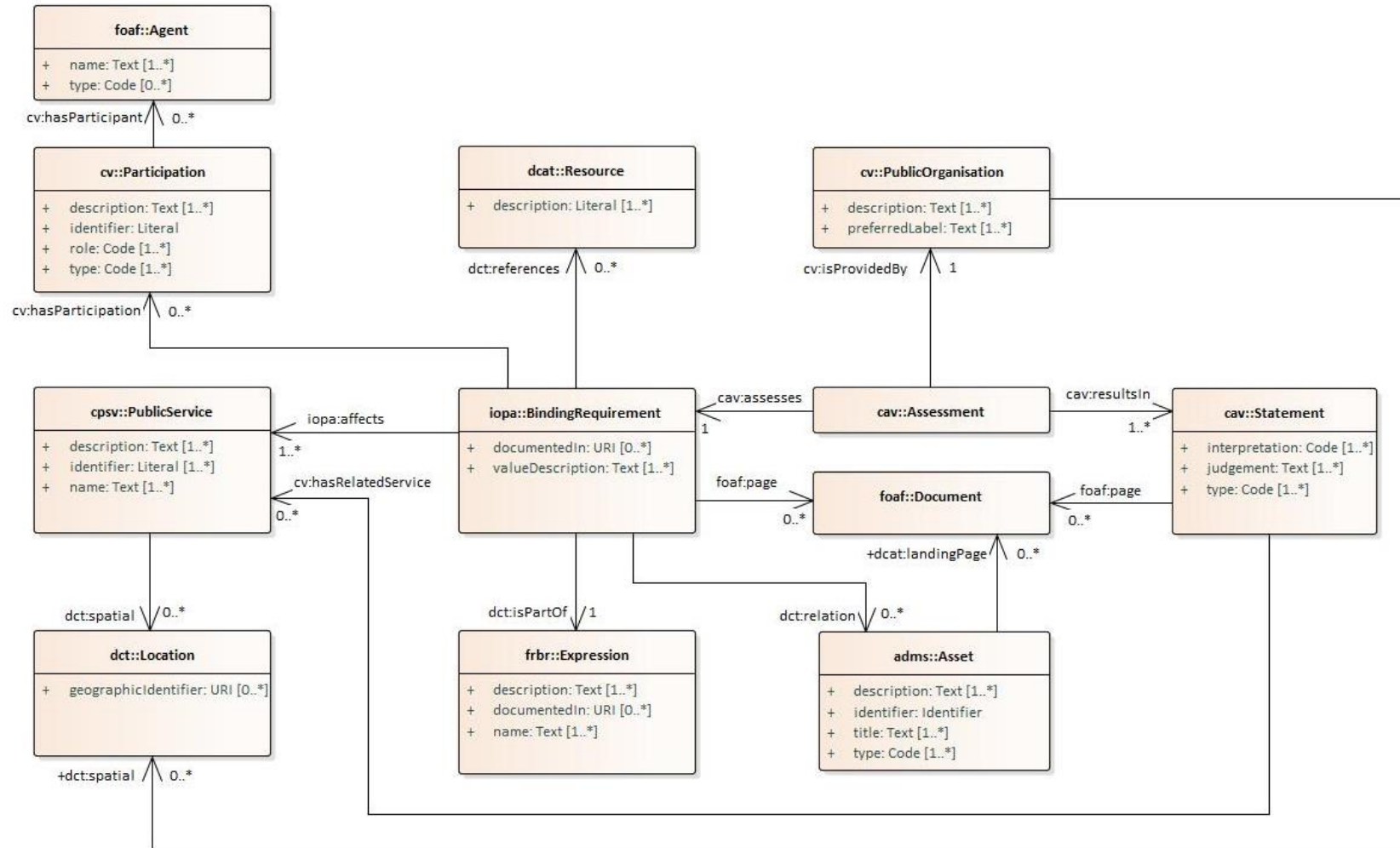
# Next Steps

# How are SEMIC specifications created and maintained?

**STEP 1  Initial Need**

An Initial need and use cases are identified by the Community. Needs can be related to specific requirements from a Member State, related to EU legislation, issue in the current specification etc.

**STEP 2 Dialogue**

A dialogue is started to resolve issues and find solutions to fulfil the Member States' needs and Identify further needs. These dialogues take place on GitHub and during webinars.

**STEP 3 Editing**

The required changes identified in the previous step are integrated into the relevant Core Vocabulary.

**STEP 4 Public Review**

The new version of the Vocabulary is shared with the community. The community is encouraged to test and provide feedback.

**STEP 5 Repeat**

The process recommences taking into account the feedback from the public review and new needs.

European Commission

# Initial Use Cases

> To publish IOPA in a machine-readable format in compliance with the Act

> Facilitate interoperability between National to European portals hosting IOPAs

> Enable the Interoperable Europe Portal to store and host IOPAs

> Find conflicts and alignment opportunities with other legislation

> Reuse older IOPA for new and similar binding requirements

> **WHAT ARE YOUR POTENTIAL USE CASES?**

# How to contribute?

**Share you Use cases** on <u>GitHub</u>: "as a ... I want to ... " mention your MS and Organisation

**Vote and comment** on other Use Cases

Only Use cases with sufficient traction will be incorporated

Use Cases with little traction would be in scope of MS sub-Profiles

Semantic and Technical comments are also welcome following the same system

**Vote during webinars** – Votes need to represent a majority of participants and MS

# IOPA Vocabulary development

**Introduction to the initial model**
Familiarise the community and invite feedback, Use Cases and further needs

Today

**First Working Session**
Go over proposed changes based on gathered input. Establish the Use Cases as final

7 May 2025

**Second Working Session (Optional)**
Iterate on the model based on the review. If review is self explanatory no session is needed.

5 June 2025

Today
–
24 April 2025

**Gather other input**
All community members to share their view and needs supported by proposed use cases.

7 May
–
22 May 2025

**In-depth review**
Community to review the outcomes of the working session.

30 June 2025

**Closing Working Session**
Close the development of the model delivering a stable version facilitating development.
**Depending on the changes deployment may take 3-6 Months**

European Commission

# DG DIGIT synergies

> The model connects to CAMSS: Common Assessment Methodology for Standards & Specifications and its underlying Core Assessment Vocabulary

> The model connects to the Interoperable Europe Solutions hosted on the Portal

> The model connects to Catalogue of Services through CPSV-AP

> The model is developed alongside the Reporting Requirement Metadata Vocabulary (RRMV)

> The model is developed alongside the Legal Financial Digital Statement Vocabulary (LFDS)

> **Does it or could it connect to your initiatives?**

Wrap-up

# Immediate next steps

> Block your agenda

> Share needs and feedback supported by (your) use cases on <u>GitHub here</u>.

> Participate in the development cycle! Propose your solutions!

Thank you

**Stay in touch**

| | |
|---|---|
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| ▶ | [Interoperable Europe - YouTube](#) |
| in | [Interoperable Europe | LinkedIn](#) |
| ✉ | [DIGIT-INTEROPERABILITY@ec.europa.eu](mailto:DIGIT-INTEROPERABILITY@ec.europa.eu) |
| 🌐 | [https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe](https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe) |