IMAPS v1.2.0

Interoperability Maturity Assessment of a Public Service

User guide



Interoperability Maturity Assessment of Your Digital Public Service

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Table of Abbreviations

Acronym	Description
ABB	Architectural Building Block
CAMSS	Common Assessment Method for Standards and Specifications
DIGIT	Directorate-General for Informatics
EC	European Commission
EIF	European Interoperability Framework
EIRA	European Interoperability Reference Architecture
EU	European Union
IMAPS	Interoperability Maturity Assessment of a Public Service
IMM	Interoperability Maturity Model
ISA	Interoperability Services for Public Administrations
IQAT	Interoperability Quick Assessment Toolkit
LIMAPS	Legal Interoperability Maturity Assessment of a Public Service
MS	Member State
	Organisational Interoperability Maturity Assessment of a
OIMAPS	Public Service
PA	Public Administration
	Semantic Interoperability Maturity Assessment of a Public
SIMAPS	Service
	Technical Interoperability Maturity Assessment of a Public
TIMAPS	Service

Glossary of terms

Term	Description
Attribute	Structural part of each IMAPS component. Each attribute assesses a specific aspect of a digital public service, e.g. the behavioural interoperability specifications of data, information and knowledge delivered by the public service to its end users and/or other client services
Component	Fundamental structural part of the IMAPS model. Each component refers to a different pillar of public service lifecycle. IMAPS has three components: Service Delivery, Service Consumption and Service Management
Item	Structural part of each IMAPS attribute. Items are the questions of the IMAPS questionnaire (survey)
Option	Options are the possible replies to one IMAPS item
Principles	Rules applied on digital public services to enable and ensure behavioural interoperability
(<i>Overall</i>) Weight	Weight refers to the absolute numerical factor that each component/attribute/item contributes into the structural part it belongs. Overall weight refers to the overall numerical factor that each component/attribute/item contributes to the whole IMAPS survey

EXECUTIVE SUMMARY

This document provides the guidelines and definitions for using the Interoperability Maturity Assessment of Public Services (IMAPS) model in order to assess and improve the interoperability maturity of a digital public service. IMAPS survey assesses the behavioural aspects of a digital public service from the legal, organisational, semantic and technical interoperability viewpoint (L, O, S, T). IMAPS allows public service owners to evaluate the interoperability maturity level of their digital public service. It uses the Interoperability Maturity Assessment of Public Services (IMAPS) model, which provides public administrations insight into two key aspects of their interoperability performance:

- The current interoperability maturity level of a Public Service
- Improvement priorities to reach the next level of interoperability maturity

IMAPS measures how well a public administration interacts with external entities in order to organise the efficient provisioning of its public services to other public administrations, businesses and/or citizens. The IMAPS survey helps public service owners of to enhance the quality of the service delivery, reduce costs and overcome integration issues by reusing available services in an effective manner in order to maximize the service outcome and benefits for citizens and public administrations.

In the following chapters, we provide an introduction to the most important chapters in the context of IMAPS and we present its objectives, the defined maturity levels and the approach and attributes of behavioural interoperability that are the subject of observation and assessment.

Finally, we conclude with an explanation of the structure of the IMAPS questionnaire and the methodology used to determine the maturity levels of behavioural interoperability of a digital public service.

1 INTRODUCTION

1.1 Document Objectives

The present deliverable documents the guidelines and definitions for using the Interoperability Maturity Assessment of Public Services (IMAPS) model in order to assess and improve the behavioural interoperability maturity of a digital public service. IMAPS survey assesses the behavioural aspects of a digital public service from the legal, organisational, semantic and technical interoperability viewpoints (L, O, S, T). This document is also based on the updates of IMAPS to version 1.2.0 by implementing the alignment with the IQAT tool as well as the feedback collected during IMAPS version 1.0.0 deployment and review and SIMAPS BETA deployment and review, as this has been recorded in the respective JIRA tickets. These updates include the description of IMAPS version 1.2.0, its purpose and scope, as well as its design and deployment on the EU Survey portal. The objectives of the present deliverable are the following:

- the description of the **key concepts** to understand the IMAPS survey;
- the presentation of the IMAPS model objectives;
- the description of the IMAPS **maturity levels**, as well as the **behavioural interoperability aspects** that it covers;
- the description of the IMAPS structure including its attributes and components;
- the description of how the IMAPS **questionnaire** is structured.

1.2 Document Structure

The document is organised in the following chapters:

- **Executive summary**, which provides an overview of the deliverable objectives, activities and conclusions;
- **Chapter 1:** Serves as introduction to the document;
- Chapter 2: Includes the description of the key concepts used in IMAPS;
- Chapter 3: Presents the IMAPS model objectives;
- **Chapter 4**: Includes the maturity levels of IMAPS, as well as the behavioural interoperability aspects that it covers;
- **Chapter 5:** Presents IMAPS structure, in components, attributes and items, demonstrating how their design ensures alignment with EIF and EIRA;
- **Chapter 6**: Presents the IMAPS questionnaire and how it is structured.

2 IMAPS KEY CONCEPTS

The following concepts are key to understand the IMAPS:

- *Public service* services that public authorities identify as being of particular importance to citizens (A2C), businesses (A2B) and public administrations (A2A) and that would not be supplied (or would be supplied under different conditions) if there were no public intervention. Examples are transport networks, postal services and social services.
- *Digital public service* the digital delivery of a public service via channels such as interactive digital collaborations (chat, messaging functionality), mobile application, web portal / website, email and machine-to-machine interface.
- Interoperability the ability of disparate and diverse organisations to interact towards mutually beneficial and agreed common goals, involving the sharing of information and knowledge between the organisations, through the business processes they support, by means of the exchange of data between their respective IT systems.

2.1 Public Service

From a conceptual point of view, a public service starts with a trigger, goes through a number of steps and delivers an outcome towards an end user. The outcome may be, but not necessarily, a public decision (e.g. issuing of a license involves a decision, issuing of an electronic fee involves a decision, etc.). The aforementioned conceptual model of a public service is illustrated in the below figure.



Figure 1: Conceptual model of a public service

For illustration purposes, the conceptual model is applied to the public service "Income tax declaration". In simple terms:

- The service's trigger is the new fiscal year.
- The main process steps it comprises are the following:
 - i. Collect information;
 - ii. Let citizen validate information;
 - iii. Check declaration
- The outcome is the public decision on the amount of income tax, which is due.

2.2 Digital public service

The Interoperability Maturity Assessment of Public Services (IMAPS) assesses the behavioural interoperability of a digital public service. The following four design rules apply when defining a digital public service:

- The digital public service has a service outcome / public decision. When multiple service outcomes are recognised, multiple digital public services will need to be defined and assessed, each through a separate IMAPS assessment (only if the answers to the questions are not identical and consequently generate different results and recommendations);
- 2. The digital public service has a single service owner (the public administration responsible for the service). When the ownership of a service is distributed amongst multiple public administrations (e.g. multiple local administrations providing birth certificates), each service owner needs to conduct a separate assessment for his respective service (only if the answers to the questions are not identical and consequently generate different results and recommendations);
- 3. The digital public service has a single primary end user group. The digital public service has a single primary end user group. Services can be delivered towards three types of end users (front office): citizens, business and other public administrations, or they can be consumed by another service (back-office). The IMAPS has been designed to evaluate services which are delivered and consumed by end users (i.e. front-office services), as well as by other IT systems (i.e. back-office services). In case the same digital public service is delivered to different types of end users, these services should be assessed separately from one another through the IMAPS (only if the answers to the questions are not identical and consequently generate different results and recommendations);
- 4. The digital public service has a visual end user interface (e.g. web portal or app) or is taking form of machine-to-machine interaction.

Examples of digital public services that conform to the aforementioned design rules are the following:

- Citizens (3) are offered the service to access their Electronic Health Record (1) via the eHealth portal (4) of the Danish Sunhed (2);
- Citizens (3) are offered the service to issue an e-administrative fee (1) via the GSIS portal (4) provided by the Ministry of Digital Government (2);
- Administrations (3) are offered the service to obtain European vehicle information (1) via the web service (4) of the EUCARIS (2).

2.3 Interoperability and IMAPS

Interoperability in a digital public service is an attribution defined as "the extent it enables peer-topeer collaboration with public services towards mutually beneficial goals, involving the sharing of data, information and knowledge between them regardless their legal, organisational, semantic and technical environment". Figure 2 illustrates the digital public service in the context of interoperability.

Interoperability is of multidimensional nature involving structural interoperability, behavioural interoperability and governance interoperability:

- 1. The **structural interoperability** is "the extent its structure has been developed reusing and/or sharing components in support of a peer-to-peer collaboration"
- 2. The **behavioural interoperability** is "the extent its manifested behaviour exchanges data, information or knowledge with its environment in support of a peer-to-peer collaboration"
- 3. The **governance interoperability** is "the extent its agreed choreography rules support a peerto-peer collaboration"



Figure 2: Interoperability dimensions

In addition, all relationships that interconnect the digital public service with the outside environment are considered relevant for assessing interoperability and thus, they are taken into account in the IMAPS. Interoperability and IMAPS are concerned with how the relationship between internal and external domains is defined and implemented.

In particular, IMAPS measures how well a public administration interacts with **external** entities to organise the efficient provisioning of its public services to other public administrations, businesses and citizens. IMAPS uses the term "behavioural" to refer to the fact that it assesses aspects that have to do with how the public services "behave" while interacting with each other or with their end users (citizens, business or other Public Administrations).

The figure below describes all possible instances where interoperability with the outside world may occur from the digital public service viewpoint. It distinguishes between the internal domain (here the organisation **produces** the public services) and the external domain (here the public service **reuses** existing services from other administrations and/or businesses.

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Figure 3: IMAPS behavioural interoperability viewpoint

3 IMAPS MODEL OBJECTIVES

IMAPS delivers insights into two important aspects of the interoperability maturity:

- Provides insight into the **current interoperability maturity** of a digital public service based on a set of defined interoperability attributes and maturity stages;
- Provides guidelines for how the digital public service can **improve its interoperability maturity.**

Although the IMAPS is publicly available for any organisation and citizens interested, the main target audience is the public service owners of digital public services that operate in an environment where interoperability is required to deliver a public service to end users.

Improving interoperability is a continuous activity. Organisations are therefore encouraged to use the model and its improvement recommendations regularly.

4 IMAPS MATURITY LEVELS

IMAPS uses a five-stage model to indicate the interoperability maturity of the digital public service. Using maturity levels allows to:

- Measure the interoperability maturity of the digital public service as a whole as well as underlying aspects;
- Indicate which capabilities and next steps are required to reach higher levels, and thus improve interoperability maturity.

A five-stage approach is often seen in proven maturity models and is considered as best practice for assessing and improving maturity. The five maturity levels for IMAPS are summarised in the table below.

Maturity Level	Maturity Stage	Interpretation
1	Ad Hoc	Poor interoperability – the digital public service cannot be considered interoperable
2	Opportunistic	Fair interoperability – the digital public service implements some elements of interoperability best practices
3	Essential	Essential interoperability – the digital public service implements the essential best practices for interoperability
4	Sustainable	Good interoperability – all relevant interoperability best practices are implemented by the digital public service
5	Seamless	Interoperability leading practice – the digital public service is a leading interoperability practice example for others

Table 1: Five maturity levels of IMAPS

The desired interoperability level for a digital public service is at least level 4: "Sustainable". At this level, the digital public service is considered to have implemented all relevant best practices.

5 BEHAVIOURAL INTEROPERABILITY ASPECTS

5.1 Approach

The approach to develop IMAPS questionnaire builds upon the fact that IMAPS measures how well a public administration interacts with the **external** entities to organise the efficient provisioning of its public services to other public administrations, businesses and citizens.

IMAPS uses the term "behavioural" to refer to the fact that it assesses aspects that have to do with how the public services "behave" while interacting with each other or with their end users (citizens, business or other Public Administrations). Figure 4 below illustrates the IMAPS perspective from the **behavioural** interoperability viewpoint, which enables the business information exchange among different public services.



Figure 4: IMAPS perspective

The behavioural interoperability aspects are described below:

- Service Delivery (D) Delivery of the digital public service to its end users;
- Service Consumption (C) Consumption of reusable machine-to-machine services from other public administrations and businesses. This can include the consumption of functionalities, base registry information and security services;
- Service Management (B) Controlling and monitoring the process flow related to service interactions with the external domain from trigger to outcome. This area includes Service Management aspects such as enterprise architecture, procurement, and service level management.

The figure below describes all possible instances where behavioural interoperability with the outside world may occur from the digital public service viewpoint.

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Figure 5: IMAPS behavioural interoperability viewpoint

The areas (hereafter referred to as Interoperability Areas) indicated in the figure above are the object of measurement in the IMAPS, specifying where interoperability plays a role from a service management, service delivery and service consumption viewpoint.

5.2 Service Delivery (D)

The public administration delivers the digital public service towards end users i.e. citizens, businesses or other administrations. We call this **Service Delivery**. The service that is being delivered represents the focal point of the IMAPS in terms of correctly scoping and delimiting the digital public service under evaluation. If service delivery is scoped correctly, the scoping of the other areas becomes more straightforward. The Service Delivery area focuses on the delivery of the digital public service to its end users or other services.

5.3 Service Consumption (C)

For delivering the digital public service towards the end user, the digital public service may be required to consume services of other public administrations or businesses. This area is called **Service Consumption** and it focuses on the consumption of reusable machine-to-machine (client) services from other public administrations and businesses. This can indicatively include the consumption of functionalities, base registry information and security services.

Digital public services that consume (reuse) existing services where possible are considered more interoperable than organisations that produce (develop) their own proprietary services without reusing existing functionalities.

5.4 Service Management (B)

This area focuses on important **Service Management** aspects on the area of sharing and reuse and design of the digital public service. Digital public services are considered more interoperable if documentation, source code, services and support is provided towards other administrations and business for reuse. In addition, this area covers important design aspects that ensure future-proof

interoperability such as architecture, processes, orchestration, procurement and service level management

5.5 Case examples

The following case examples (see Table 2) illustrate the interoperability areas of delivery, and service consumption. They are taken from real-life examples based on which the Interoperability Maturity Model has been developed. Such case examples are outlined to guide users of the model in defining and delimiting their public service's interconnections correctly.

Digital Public Service	Service Delivery	Service Consumption
Electronic Health Record	Citizens are offered the service to access	Payment services
Access	their Electronic Health Record via eHealth	
	portal.	Identify and access
	Case example: The service called "my	, management services
	Health summary" is available through the	indiagement services
	Danish eHealth portal 'Sundhed.dk' for	eSignature services
	obtain an overview of their own patient	Ū
	data.	Personal medicine data
		Donor registration
		Living will registration
		Laboratory data
Online Patent Filing	Businesses are offered the service to	Payment services
	register and nay for the filling of natents	r ayment services
	Case example: The FPO Online Filing	
	client application provides applicants with	Identify and access
	a standard form for filing patent	management services
	applications online with the European	
	Patent Office. Once the request is filed,	eSignature services
	the applicant receives an electronic	
	notification of receipt. If the applicant has	
	set up an online Mailbox, he will receive	
	all further communication from the EPO	
	via this Mailbox, including requests for	
	rectifying the application and the	
	invitation to pay claims fees.	
Government e-invoicing	Businesses are offered the service to	Payment services
	send online invoices to the various	
	government administrations.	Identify and access
	Case example: Businesses can send all	management services
	their invoices in electronic format to the	
	Dutch government. In total, more than 78	eSignature services
	government bodies have implemented	
	the electronic invoicing solution. The	

Table 2: Examples of interoperability areas of digital public services

sending and receipt of e-Invoices can take place through two channels: Digipoort (direct access or via an intermediary) or the e-Invoicing portal	
www.facturerenaandeoverheid.nl	

5.6 IMAPS Attributes

5.6.1 IMAPS Components' attributes

IMAPS components' attributes are presented in the table below.

Table 3: Service delivery, service consumption and service management attributes

	Service Delivery	
Attribute	Rationale	
Data, information and knowledge delivered	Assesses the behavioural interoperability specifications of data, information and knowledge delivered by the public service to its end users and/or other client services.	
Service Delivery Enablers	Assesses the behavioural interoperability capabilities that enable either i) the delivery of data, information and knowledge by the digital public service to its end users and/or other client services or ii) the discoverability of the public service.	
Service Delivery Manifestations	Assesses the behavioural interoperability manifestations of the public service delivering data, information and knowledge (manifestations can be performance, results, user experience).	
	Service Consumption	
Attribute	Rationale	
Data, information and knowledge consumed	Assesses the behavioural interoperability specifications of data, information and knowledge consumed by the public service from other server services	
Service Consumption Enablers	Assesses the behavioural interoperability capabilities that enable the public service to either i) discover other server services and/or ii) consume their data, information and knowledge	
Service Consumption Manifestations	Assesses the behavioural interoperability manifestations of the public service consuming data, information and knowledge (manifestations can be performance, results, user experience).	
	Service Management	
Attribute	Rationale	
Data, information and knowledge management	Assesses the behavioural interoperability specifications of data, information and knowledge consumed by the public service from other server services	
Service Management Enablers	Assesses the behavioural interoperability capabilities that enable the public service to manage data, information and knowledge	
Service Management Manifestations	Assesses the behavioural interoperability manifestations of the public service managing data, information and knowledge (manifestations can be performance, results, user experience).	

5.6.2 Sources of Input

Various related programmes and initiatives inside and outside ISA have been leveraged to build the current set of IMAPS Attributes. The most important ones are:

- <u>European Interoperability Framework</u> The European Interoperability Framework (EIF) serves as an important framework for organisations to promote and improve interoperability and therefore is considered as a paramount starting point for defining IMAPS attributes. The respective items per attribute have been specifically formed to assess the level of conformance with the elements of EIF structure (principles/layers/conceptual model)¹. The basis to define IMAPS items have been the EIF recommendations;
- <u>European Interoperability Reference Architecture (EIRA)</u> EIRA version 3.0.0 compliance is ensured at the level of IMAPS attributes. In this context, the respective items per attribute have been specifically formed to assess the level of conformance with the EIRA Architecture Building Blocks (ABBs). The basis to define IMAPS items has been the context of each one of the EIRA version 3.0.0 ABBs.
- <u>Digital Single Market</u> the Digital Single Market strategy aims to open up digital opportunities for people and business and enhance Europe's position as a world leader in the digital economy. Select attributes were defined to align with this ambition; the terminology of IMAPS overall embraces the key concepts of "digitalisation" in its various aspects;
- Interoperability Maturity Assessment of a Public Service (IMAPS)² IMAPS is an online survey that helps public service owners evaluate, consider and improve all key interoperability aspects of their digital public service (legal, semantic, organisational, or technical). Ultimately, they can view and monitor the service's compliance with the New European Interoperability Framework (EIF). Not only can IMAPS be used to assess the interoperability of any public service from open data portals, and e-voting platforms, to public procurement services, and much more it is applicable to services at all levels of government (international, national, regional and local).
- Interoperability Quick Assessment Toolkit (IQAT©)³ IQAT© has been developed in the context of Action 2016.36 Assessment of trans-European systems supporting EU policies of the Interoperability solutions and common frameworks for European public administrations, businesses and citizens. The objective of the IQAT© is to allows public service owners to evaluate the structural interoperability maturity level of their digital public service.

¹ Compliance of IMAPS with EIF at the level of principles, layers and conceptual model has been also validated following the paradigm of CAMSS approach to demonstrate their scenarios' conformance with EIF.

² <u>https://joinup.ec.europa.eu/collection/imaps-interoperability-maturity-assessment-public-service/about</u>

³ <u>https://joinup.ec.europa.eu/solution/interoperability-quick-assessment-toolkit</u>

6 IMAPS QUESTIONNAIRE

IMAPS uses a questionnaire structure for assessing the behavioural interoperability maturity of a digital public service. This section details the questionnaire type, question types and assessment structure in more detail.

IMAPS questionnaire is a compact and highly user-friendly tool available online. Designed as a selfassessment tool, IMAPS assessment criteria have been condensed into targeted question sets in order to evaluate key **behavioural** interoperability aspects of a digital public service. Such insight results in personalised, confidential feedback and recommendations on how a service can improve.

IMAPS Questionnaire is designed to take approximately 30 minutes to complete. Once the questionnaire is completed, a report is generated with the behavioural interoperability scores plus recommendations on how to further improve the digital public service's behavioural interoperability.

6.1 Questionnaire Structure

This section outlines the structure of the questionnaire. The four main sections of the questionnaire are in line with the earlier presented overview of behavioural interoperability aspects (section 2.4):

- Service Identification (A): This section assesses the scope of the digital public service (the object of measurement, i.e. the digital public service to examine), service landscaping and gathers important information for follow-up (contact details, etc.);
- Service Delivery (D): The section assesses how the digital public service delivers its service;
- Service Consumption (C): This section assesses if and how services are consumed from other administrations and businesses.
- Service Management (B): This section assesses how the digital public service arranges the consumption and provisioning of external services and includes Service Management aspects such as architecture, procurement and service level management.

The questionnaire routing is sequential at the level of the main areas (A, B, C, D). The questions within areas A, B, C and D are also defined sequentially and need to be filled in one after the other.

The following figures illustrate the sections A, B, C and D of IMAPS questionnaire as described above.

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Service Identification (A)

In this section, please answer the following questions regarding the context of your public service.

A1B. Please provide your email address:	
A1B. Please provide your email address:	
ATB. Please provide your email address:	
Ve will send your report to this email address	
	//
A1C. Please provide your phone number:	
The second secon	
A1D. Please indicate the country of the organisation providing	g the digital public servio
⊖ Austria	
O Belgium	
🔿 Bulgaria	
⊖ Croatia	
⊖ Cyprus	
O Czechia	
O Denmark	
⊖ Estonia	
○ Finland	
 Finland France 	
 Finland France Germany 	

* A2C. Appearance: How does the digital public service deliver the outcome towards the end user group?

- The public service does not deliver the outcome directly towards a person but towards other IT systems (machine-tomachine interface)
- O The public service delivers the outcome towards the end users via traditional channels e.g. phone, postal service
- O The public service delivers the outcome towards the end users via digital channels, e.g., through a web portal/website or an application

* A3. Owner: Which public administration is primarily responsible for providing the digital public service?

- O Ministry e.g. Ministry of Public Administration, Ministry of Justice
- Public Administration e.g. Tax Administration
- Directorate-General of the European Commission e.g. DG COMM, DG JUST, DGIT
- Government institution/agency/office e.g. National Agency for Information Society, National Centre for Public Administration and Local Government (EKDDA)
- O EU inistitution/agency/office e.g. EU Publications Office
- O Other Legal Entity

Figure 7: Section A of IMAPS questionnaire





The public administration delivers the digital public service towards end users i.e. citizens, businesses or other administrations. We call this **Service Delivery**. The service that is being delivered represents the focal point of the IMAPS in terms of correctly scoping and delimiting the digital public service under evaluation. If service delivery is scoped correctly, the scoping of the other areas

Figure 8: Section D of IMAPS questionnaire

Service Delivery Manifestations

*Assesses the behavioural interoperability manifestations of the public service delivering data, information and knowledge. *(manifestations can be performance, results, user experience)

* D8. Through which delivery channels is the digital public service made available to the user(s)? More Info

Enabler / Manifestation EIF Interoperability View: L. O. S. T

One digital channel

- One digital and one traditional channel
- O Multiple digital and traditional channels
- O Multiple digital (including interactive digital collaboration M2M) and traditional channels

* D9. Does the digital public service use pre-filling for the data and information requested? More Info

Enabler / Manifestation EIF Interoperability View: L. O. S. T

- \bigcirc No, while this would be possible
- O Partly, pre-filling is used but only for some data fields that are digitally available
- $\odot\,$ Fully, pre-filling is used for all data fields that are digitally available
- $\bigcirc\,$ Not applicable, the digital public service does not require data entries

Figure 9: Section D of IMAPS questionnaire

Service Consumption (C)



For delivering the digital public service towards the end user, the digital public service may be required to consume services of other public administrations or businesses. This area is called **Service Consumption**.

There are various types of services that can be consumed by digital public services:

Figure 10: Section C of IMAPS questionnaire

Data, information and knowledge consumed

*Assesses the behavioural interoperability specifications of data, information and knowledge consumed by the public service from other server services

* C1. How does the digital public service currently consume the services (manually versus digitally)? More Info

Enabler / Manifestation EIF Interoperability View: L. O. S. T

- O Fully manually
- Mainly manually, some digitally
- Mix of manual and digital consumption
- Mainly digitally, some manually
- Fully digitally

* C2. Does the digital public service reuse or self-produce consumed services? More Info

Enabler / Manifestation

EIF Interoperability View: L. O. S. **T**

 $\odot\,$ Most consumed services are self-produced, while relevant services are available for reuse

- A selection of consumed services are reused
- (Nearly) all consumed services are reused

Figure 11: Section C of IMAPS questionnaire

Service Management (D)



This area focuses on important Service Management aspects on the area of sharing and reuse and design of the digital public service. Digital public services are considered more interoperable if documentation, source code, services and support is provided

Figure 12: Section B of IMAPS questionnaire

Service Management Enablers

* Assesses the behavioural interoperability capabilities that enable the public service to manage data, information and knowledge

* B8. Please provide insight if and how the digital public service shares components and knowledge with the external environment?

- Sharing documentation to provide other (related) organisations valuable insights into processes, organisation,
- governance, technology choices, etc. Sharing source code or downloadable software to enable other organisations to effectively build their services
- · Making available open Web-API services to enable other organisations and individuals to (re)use functionality and/or gain access to data via web and/or mobile apps
- · Providing support to organisations leveraging the resources provided.

More Info

Enabler / Manifestation

EIF Interoperability View: L. O. S. T

- O No, there is no security profile established
- Yes, there is an ad-hoc security profile
- O Yes, there is a security profile following a specific semantic model

* B9. How is data protection handled? What measures are in place? (multiple answers possible) More Info

Enabler / Manifestation

EIF Interoperability View: L. O. S. T

- O There are no measures in place for data protection
- O Data protection is handled under custom policies and regulations
- O Data protection is handled under formalised regulations e.g. GDPR

Figure 13: Section B of IMAPS questionnaire