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**PROGRAMME TITLE:**

**Interoperability Maturity Assessment for Public Services**

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# Interoperability Maturity Assessment For Public Services

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# 1 INTRODUCTION TO THE INTEROPERABILITY MATURITY MODEL

The objective of this section is to assist trainees to:

- Understand the services that will be used as reference use cases for the evaluation with IMM.
- Refer to good practices for interoperable electronic public services

## 1.1 Introducing the IMM

The following components are crucial for the interoperability of a service and therefore they have been reflected to specific sections of the IMM questionnaire.

**Service Delivery (B)** – Providing end-users access to the public service.

**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 for example.

**Service Management (D)** – 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, cost-benefit analysis and the provisioning of the services towards other administrations or businesses.

The definition of the **Internal Domain** and the **External Domain** is crucial for the description of the service. Ideally internal domain services are the ones that are produced in the context of the service to be assessed, typically by the same organization or department.

External Domain Services are the ones produced by other organizations or departments and consumed for the provision of the public service to be assessed, as well as from other services.

The maturity of the interoperability can be mapped to the following scale as shown in Table 1.

Table 1: Interoperability maturity levels

Maturity level	Maturity stage	Interpretation
1	Ad Hoc	Poor interoperability – the service has almost no interoperability in place
2	Opportunistic	Fair interoperability – the service implements some elements of interoperability best practices
3	Essential	Essential interoperability – the service implements the essential best practices for interoperability
4	Sustainable	Good interoperability – all relevant interoperability best practices are implemented by the public service
5	Seamless	Interoperability leading practice – the service is a leading example for others

Typical examples that can be analyzed using the IMM model are:

- I. A doctor wants to have access to a patient’s health record,
- II. An economic operator that can participate in a public procurement procedure,

On the other hand, services that are not addressed at specific users and are either part of a general infrastructure, such as a telecommunication network or machine to machine services cannot be assessed using IMM model in its current form.

## 2 IMM QUESTIONNAIRE BY EXAMPLE

The objectives of this section are to assist trainees to:

- Describe the main elements of the interoperability checklist.
- Identify the causes that hinder the interoperability maturity of electronic public services
- Identify and refer to the supporting material provided by the European Commission
- Describe the structure of the questionnaire
- Recognise the maturity levels and what they mean in terms of availability, utilization and architecture
- Describe the provided recommendations for improving the maturity level of the assessed electronic public services

### 2.1 Service Context (section A of the IMM questionnaire)

This section aims to define the service that is going to be assessed considering the initial scope of the assessment. The definition of the internal and external environment should be made at this section following the principles and guidelines that were presented in the public service definition paragraph. Moreover in this section the contact details of the responsible people that provide the input to the questionnaire are also being collected. The service owner must also be declared in this section.

This section, as previously mentioned, is crucial for the assessment, even though it does not provide any input for the interoperability maturity level of the service. This section sets the cornerstones of the services and clarifies the assumptions that will guide the answers to the other sections of the service. The following questions are contained in section A of IMM questionnaire.

### 2.1.1 Question A1: Contact details

The names, emails, telephone numbers and generally the contact details of the people that are responsible for the input to the questionnaire are the potential answers in this question.

### 2.1.2 Question A2: Public service description

Following the guidelines of the service definition paragraph of this document, one should describe the public service. This description implies that the definition of the internal and external domain must be well clarified.

The conceptual model of the public service should be taken into account for the description of the process of the service and the underlying activities (1. initiation, 2. processing and 3. delivery of an outcome).

The way the service is being offered, e.g. the appearance (fully digital process / manual interactions) should also be described at this part of the questionnaire.

A business process model would certainly provide valuable input to this process as it can help the reader unambiguously identify all (sub)processes, stakeholders, inputs and outputs, as well as the processes flow.

Service Descriptions for the two examples analysed in this document have been provided in sections **Error! Reference source not found.** and **Error! Reference source not found.**

### 2.1.3 Question A3: Service owner

*Which public administration is primarily responsible for providing the public service?*



The service owner should be reported, especially when more than one responsible authorities contribute to the provision of the service.

In the case of the Business registration service, the service owner is the authority that is responsible for the operation of the Business Registry.

In the case of the e-administrative fee service, the service owner is the tax administration that collects taxes and fees.

#### **2.1.4 Question A4: End user group to which the service is delivered**

*What is the primary end user group to which the public service is delivered?*

The potential end user group that benefits from the services must also be described. In our examples we have the entrepreneurs that want to start up a business in the Business Registration service and citizens and businesses that interact with public administration and want to obtain a valid payment token for using a pay a fee in the e-administrative fee service.

#### **2.1.5 Question A5: Administrative level**

*What is the underlying administrative level of the public service?*

Typical examples of administrative levels can be Local (e.g. city, municipality), Regional, National, European and International level.

The underlying administrative level for both of our examples is national.