

ISA Action 4.1.2: Interoperability Maturity Model

D03.01 - IMM Questionnaire

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1 Questionnaire

1.1 Service Context (A)

1.1.1 Questions

A.1	
<i>Name</i>	Contact details
<i>Question type</i>	Open (three fields; format check on phone number / e-mail address)
<i>Rationale</i>	Gather contact information for eventual follow-up.
<i>Question</i>	Please provide your name and contact details (telephone, e-mail address).
<i>Question logic</i>	Next question

A.2	
<i>Name</i>	Digital public service description
<i>Question type</i>	Open
<i>Rationale</i>	Gain insight into the digital public service the administration provides.
<i>Question</i>	<p>A digital public service is a digital service rendered in the public interest. What is the digital public service you provide to end users (either citizens, businesses or other public administrations)?</p> <p>Use the following criteria to define a digital public service:</p> <ul style="list-style-type: none">• Describe the process and underlying activities to define the digital public service. The digital public service always has three phases (1. initiation, 2. processing and 3. delivery of an outcome). Focus on the public decision that is the outcome of the service. If there is no public decision and/or outcome, focus on the benefits the service provides to the target audience.• Define the owner of the digital public service (see also question A.3). A digital public service typically has one owner who is responsible for the outcome(s). If there are more owners, this may require that you define multiple digital public services and run an IMM assessment for each of these separately.• Define the appearance of the digital public service. How does the digital public service deliver the outcome towards the end user group? E.g. through a web portal or an app? The digital public service offers benefits and an outcome towards specified end user groups (e.g. citizens, civil servants, intermediaries). Please note there are situations in which the

	digital public service does not deliver the outcome directly towards a person but towards other IT systems (machine-to-machine).
<i>Examples</i>	Submission of yearly income tax declaration for citizens (administration-to-citizen); change of residence of a citizen (administration-to-citizen); online information provisioning on relevant jobs to citizens (administration-to-citizen); posting of vacancies on a job portal for businesses via a machine-to-machine interface (administration-to-business); providing information on the whereabouts of specific cargo to businesses (administration-to-business); providing classification services towards other administrations for ensuring international standardisation of patent data via a machine-to-machine interface (administration-to-administration).
<i>Question logic</i>	Next question

A.3

<i>Name</i>	Service owner
<i>Question type</i>	Open
<i>Rationale</i>	This question determines the scope / boundaries of the public administration providing the digital public service.
<i>Question</i>	Which public administration is primarily responsible for providing the digital public service?
<i>Examples</i>	A tax administration; A department/unit within a tax administration; A Directorate-General (DG); A municipality.
<i>Question logic</i>	Next question

A.4

<i>Name</i>	End user group(s) to which the service is delivered
<i>Question type</i>	Open
<i>Rationale</i>	Determine the end user group(s) to which the digital public service is delivered.
<i>Question</i>	What is the end user group to whom the digital public service is delivered?
<i>Examples</i>	A specific group of businesses; A specific group of citizens; A specific group of public administrations. See also the explanations provided under A.2.
<i>Question logic</i>	Next question

A.5

<i>Name</i>	Administrative level
<i>Question type</i>	Multiple choice (>1 possible answer)
<i>Rationale</i>	Gain insight into the government tier providing the digital public service.
<i>Question</i>	<p>At what administrative level is the digital public service provided (multiple answers are possible)?</p> <ul style="list-style-type: none">■ Local (e.g. city, municipality)■ Regional■ National■ European■ International
<i>Question logic</i>	Next question

1.1.2 Maturity scoring

This section is not scored.

1.2 Service Delivery (B)

1.2.1 Questions

B.1	
<i>Name</i>	Delivery channels
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Organisational interoperability; Technical interoperability
<i>Weight</i>	15%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Assesses through which channels the digital public service is delivered towards the user(s). This question captures both traditional (non-digital) and digital channels. Digital channels are: interactive digital collaboration (chat, cognitive agent), mobile app, web portal / website, e-mail and a machine-to-machine interface. Traditional channels are: physical counter, postal and telephone.
<i>Question</i>	<p>Through which delivery channels is the digital public service made available to the user(s)?</p> <ul style="list-style-type: none">■ One digital channel.■ One digital and one traditional channel.■ Multiple digital and traditional channels.■ Multiple digital (including interactive digital collaboration) and traditional channels.
<i>Examples</i>	The digital public service is made available via a portal that provides access to a set of public services (www.mijnrijksoverheid.nl); The service is made available via a dedicated website, telephone and physical counter.
<i>Question logic</i>	Next question

B.2	
<i>Name</i>	Pre-filling
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability; Semantic interoperability; Technical interoperability
<i>Weight</i>	15%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Re-use of existing trustworthy data sources to pre-fill data fields should be stimulated as it minimizes user effort and reduces the risk for erroneous data entries.

<i>Question</i>	Does the digital public service use pre-filling for digitally available data fields? <ul style="list-style-type: none"> ■ No, while this would be possible. ■ Partly, pre-filling is used but only for some data fields that are digitally available. ■ Fully, pre-filling is used for all data fields that are digitally available. ■ Not applicable, the digital public service does not require data entries.
<i>Examples</i>	Name and address data are prefilled from existing internal or external base registries (or other data sources). Note that pre-filling also includes the automated filling of drop-down boxes and/or automatic completion of key words.
<i>Question logic</i>	Next question

B.3

<i>Name</i>	Procedural transparency
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Users should have maximum insight into the process they are subject to.
<i>Question</i>	Are the administrative rules and processes underlying the digital public service (such as decision mechanisms, lead times, information sources used, reporting obligations) transparent to the user(s)? <ul style="list-style-type: none"> ■ No, there is no information on rules & processes available before, during and / or after usage of the digital public service. This information resides somewhere else (i.e. is not imminently discoverable). ■ Partly, there is limited information on rules & processes available before, during and / or after usage of the digital public service. ■ Fully, there is detailed information on rules & processes available before, during and/or after usage of the digital public service. ■ Not applicable, the digital public service does not need to provide insight into administrative rules and processes (e.g. only information provisioning, search functionality).
<i>Examples</i>	The citizen is made aware of how long the decision-making process of the public administration will take as regards his entitlement to family benefits. The business owner is informed about what exactly

he needs to report on and for what purpose when registering his business.

Question logic

Next question

B.4

<i>Name</i>	Data privacy
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Transparency as regards how personal data is managed is essential in fostering users' trust in the digital public service.
<i>Question</i>	<p>Are data privacy considerations transparent to the user (such as scope of data stored, purpose of usage of data, rights to request changes or lodge complaints, applicable data privacy regulation)?</p> <ul style="list-style-type: none">■ No, there is no information on data privacy available.■ Partly, there is limited information on data privacy available.■ Fully, there is detailed information on data privacy available.■ Fully & adaptable, there is detailed information on data privacy available and the user can manage (some of his) data privacy settings online.■ Not applicable, the digital public service does not require personal data (e.g. only information provisioning, search functionality).
<i>Examples</i>	The citizen is redirected to a secure site where she can manage her privacy settings. The business owner is informed about what business data will be shared with other administrations.
<i>Question logic</i>	Next question

B.5

<i>Name</i>	User feedback
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability
<i>Weight</i>	5%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Being able to provide feedback is essential to empower users in their relation with public administrations and improve digital public services' quality.
<i>Question</i>	Can users give feedback on the quality of the digital public service?

	<ul style="list-style-type: none"> ■ No, the digital public service does not provide for feedback possibilities. ■ Yes, feedback is possible through a physical channel (e.g. phone, postal). ■ Yes, feedback is possible through a digital channel (e.g. email, website, chat). ■ Yes, feedback is possible through a digital channel (e.g. email, website, chat). In addition, the digital public service offers insight into feedback and/or reviews from other end users.
<i>Examples</i>	At the end of the service delivery process, citizens can rate the pension benefit service. Users can see how others have rated the same service.
<i>Question logic</i>	Next question

B.6	
<i>Name</i>	Accessibility
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Semantic interoperability; Technical interoperability
<i>Weight</i>	5%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Accessibility ensures that people with all abilities and disabilities can perceive, understand, navigate, and interact with the digital public service.
<i>Question</i>	<p>Is the digital public service accessible to people with (e.g. visual, auditory, physical, cognitive) disabilities at a comparable level as to other users?</p> <ul style="list-style-type: none"> ■ No, the digital public service is not equally accessible. ■ Partly, the digital public service provides some accessibility features. ■ Fully, the digital public service is compliant with an accessibility standard such as Web Content Accessibility (WAI) Guidelines 2.0, level AA. ■ Not applicable, the digital public service does not utilize a graphical user interface.
<i>Examples</i>	The digital public service features the WAI conformance logo as proof of compliance at AA level. The web site has been designed with accessibility criteria in mind such as text equivalents and consistent navigation.
<i>Question logic</i>	Next question

B.7

<i>Name</i>	Cross border service delivery
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability; Semantic interoperability; Technical interoperability
<i>Weight</i>	5%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	The Digital Single Market stipulates seamless public service delivery across all European countries.
<i>Question</i>	<p>Are there any restrictions to non-residents or foreigners for using the digital public service?</p> <ul style="list-style-type: none"> ■ Yes, there are restrictions to use the digital public service. ■ No, there are no restrictions to use the digital public service.
<i>Examples</i>	An electronic ID issued by country A is required to access the cadastre service whilst foreigners who though may require using the service cannot obtain such an ID. A national of country B cannot view her pension entitlements as she has worked in multiple EU countries and her records are not reconciled across these.
<i>Question logic</i>	Next question

B.8

<i>Name</i>	Multilingualism
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Organisational interoperability; Semantic interoperability; Technical interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Multilingualism in the context of computing indicates that a digital public service dynamically supports two or more languages.
<i>Question</i>	<p>To what extent is multilingualism supported?</p> <ul style="list-style-type: none"> ■ No, the digital public service is only available in a single language. ■ Partly, some pages and/or documentation is available in multiple languages. ■ Fully, the entire digital public service (from initiation to outcome, including all documentation) is available in multiple languages.
<i>Examples</i>	There is information on the criminal records service available in a non-official language of country A but the service to request such a record is only available in the country's official language.

Question logic | Next question

B.9

<i>Name</i>	Data exchange
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Semantic interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Use of existing semantic standards and specifications (e.g. data models standards, standardised XML schemata, metadata standards) ensures interoperability in the data exchange between the public service and the receiving IT systems (only applicable for machine-to-machine interfacing).
<i>Question</i>	<p>To what extent are existing semantic standards and specifications used for data exchange?</p> <ul style="list-style-type: none"> ■ No, the digital public service is only using proprietary standards and is not leveraging existing (open) semantic standards for data exchange. ■ Partly, some (open) semantic standards are used for data exchange, combined with proprietary standards. ■ Fully, the data exchange is entirely based on existing (open) semantic standards and specifications. ■ Not applicable, there is no machine-to-machine interfacing.
<i>Examples</i>	A unique data model is developed specifically for data exchange. The public service uses open semantic standards for definitions and specification of the data exchange to the fullest extent available.
<i>Question logic</i>	Next question

B.10

<i>Name</i>	Service Catalogue
<i>Category</i>	Enabler
<i>EIF-layer</i>	Organisational interoperability; Semantic interoperability; Technical interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Providing detailed information on the availability & features of the public service is an enabler for the usage by citizens, business and administrations. Note that what is meant here by service catalogue is a catalogue overarching various organisations (e.g. across several administrations or a national catalogue of public services). Digital

	public services that provide information to discover their offered services are considered highly mature.
<i>Question</i>	<p>Is the digital public service included in a service catalogue?</p> <ul style="list-style-type: none"> ■ No. ■ Yes, part of a catalogue available to a restricted user group (e.g. partners). ■ Yes, part of a publicly available catalogue. ■ Yes, part of a publicly and online discoverable catalogue and includes a public service description (including information such as contact details, provider, preconditions and required input). ■ Yes, part of a publicly and online discoverable catalogue and includes a public service description based on standards such as CPSV-AP.
<i>Examples</i>	The digital public service is displayed on a government portal that holds a full repository of all public services offered to citizens, to increase the awareness and usage of the public service.
<i>Question logic</i>	Next question.

B.11

<i>Name</i>	Certification
<i>Category</i>	Enabler
<i>EIF-layer</i>	Organisational interoperability
<i>Weight</i>	5%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Certification is a success factor for ensuring working interconnections. A digital public service that requires formal certification is considered more interoperable. Certification is a formal procedure to verify if a constituency meets the prerequisites to connect to a service. Certification may examine areas like: security, governance, technological and semantic interoperability and availability.
<i>Question</i>	<p>Has the digital public service defined a certification procedure?</p> <ul style="list-style-type: none"> ■ No, there is no certification procedure available. ■ Yes, there is a certification procedure available. ■ Not applicable, certification is not required for users to access the digital public service.
<i>Examples</i>	Although there is a separate test environment made available to test the interconnection with other systems, there is no certification process to ensure proper interconnection and interoperability.
<i>Question logic</i>	Next question

1.2.2 Maturity scoring

The overall weight of this area in the total maturity score is 50%.

	Ad hoc (1)	Opportunistic (2)	Essential (3)	Sustainable (4)	Seamless (5)
B.1 (15%)	One digital channel		One digital and one traditional channel	Multiple digital and traditional channels	Multiple digital (including interactive digital collaboration) and traditional channels
B.2 (15%)	No pre-filling		Partial pre-felling		Full pre-filling
B.3 (10%)	No procedural transparency		Partial procedural transparency		Full procedural transparency
B.4 (10%)	No privacy information		Partial privacy information	Complete privacy information	Complete privacy information and user management
B.5 (5%)	No user feedback mechanism		Physical feedback channel	Digital feedback channel	Digital feedback channel and insight into others' feedback
B.6 (5%)	Unequal access		Partially equal access		Full compliance with web accessibility standards
B.7 (5%)	Restrictions towards foreigners / non nationals				No restrictions
B.8 (10%)	Unilingual		Partially multilingual		Fully multilingual
B.9 (10%)	No, only proprietary standards		Partly, based on open semantic standards		Fully, based on open semantic standards
B.10 (10%)	Not in catalogue	In catalogue with restricted audience	Publicly available catalogue	Discoverable and descriptions	Discoverable and descriptions using standards
B.11 (5%)	No, certification procedure available				Yes, a certification procedure is available

Table 1 Scoring table: Service Delivery (B)

1.3 Service Consumption (C)

1.3.1 Questions

C.1	
Name	Landscaping Service Consumption
Category	Manifestation
EIF-layer	Organisational interoperability
Weight	0%
Question type	Multiple choice (>1 answer possible, including own-defined options)
Rationale	Gain insight into the services that the digital public service is consuming.
Question	<p>Please select the services which your digital public service has to consume in order to work:</p> <ul style="list-style-type: none">■ First, indicate for the below generic services if these are required (note that this is an indicative list).■ Second, add specific services which are specific to the digital public service and required by it in order to work. <p><i>Important note:</i> Please list both services that are consumed from within the administration (internally¹) and from a third party (externally²). Please list both manually and digitally consumed services.</p> <p><i>Generic services (indicative list – select applicable ones):</i></p> <ul style="list-style-type: none">■ Authentication Service■ eSignature Service■ ePayment Service■ Messaging Service■ Audio-visual Service■ Data Transformation Service■ Data Validation Service■ Machine Translation Service■ Data Exchange Service■ Business Analytics Service■ Business Reporting Service■ Forms Management Service

¹ The public administration providing the digital public service is referred to in the questionnaire as the internal domain.

² Exchanges with actors who decide, implement and/or execute independently from the public administration are referred to as the external domain.

- Records Management Service
- Document Management Service
- Content Management Service
- Access Management Service
- Logging Service
- Audit Service
- Metadata Management Service
- Networking Service
- Hosting Service
- Storage Service
- Base Registry Information Source

Secondly: Please name any relevant specific services that are required by your digital public service in order to function.

Again: Please include both services that are consumed from within the administration (internally) and from a third party (externally). Please include both manually and digitally consumed services.

- [Open Text Field]

Examples

See above

Question logic

Next question

C.2

<i>Name</i>	Manual or digital consumption of services
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Organisational interoperability; Technical interoperability
<i>Weight</i>	40%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Gain insight into how the digital public service is being consumed.
<i>Question</i>	<p>How does the digital public service currently consume the services (manually versus digitally)?</p> <ul style="list-style-type: none">■ Fully manually■ Mainly manually, some digitally■ Mix of manual and digital consumption■ Mainly digitally, some manually■ Fully digitally
<i>Examples</i>	An example of digital consumption is the tax administration digitally fetching data from the Citizen Base Register. An example of manual consumption is fetching data with the help of a paper form.
<i>Question logic</i>	Next question

C.3

<i>Name</i>	Reusing or producing services
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Technical interoperability
<i>Weight</i>	30%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Specify how the digital public service is being consumed (reuse versus produce). Self-producing a digital public service, while a service is available externally for reuse is considered less interoperable as it implies that the public service has “reinvented the wheel”.
<i>Question</i>	<p>Does the digital public service reuse or self-produce consumed services?</p> <ul style="list-style-type: none">■ 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
<i>Examples</i>	The digital public service uses Google Translate as a translation service for her web portal (<i>Reuse</i>).

	An Identity and Access Management (IAM) service is developed and used by the administration itself while there is an institutionalized IAM-standard available in the country.
<i>Question logic</i>	Next question

C.4

<i>Name</i>	Subscriptions to updates
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Technical interoperability
<i>Weight</i>	30%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Digital public services proactively delivering on life events are considered more interoperable than their counterparts who rely on manual intervention.
<i>Question</i>	<p>Does the digital public service subscribe to automatic updates of services (e.g. life events) to trigger its execution and/or update information?</p> <ul style="list-style-type: none"> ■ No, updates require manual intervention from public service staff or end user(s). ■ Partly, some updates require manual intervention from public service staff or end user(s), while others are received automatically. ■ Fully, all relevant updates are received automatically. ■ Not applicable, such subscriptions are not considered relevant.
<i>Examples</i>	A digital public service in the area of social security receives automated updates of births from a base registry service and provides child allowance without the user having to request it.
<i>Question logic</i>	Next question

1.3.2 Maturity scoring

The overall weight of this area in the total maturity score is 20%.

	Ad hoc (1)	Opportunistic (2)	Essential (3)	Sustainable (4)	Seamless (5)
C.1 (0%)	No score				
C.2 (40%)	Fully manually	Mainly manually, some digitally	Mix of manual and digital consumption	Mainly digitally, some manually	Fully digitally
C.3 (30%)	Most consumed services are		A selection of consumed		(Nearly) all consumed

	self-produced, while relevant services are available for reuse		services are reused		services are reused
C.4 (30%)	No, updates require manual intervention from public service staff or end user(s)		Partly, some updates require manual intervention from public service staff or end user(s), while others are received automatically		Fully, all relevant updates are received automatically

Table 2 **Scoring table: Service consumption (C)**

1.4 Service Management (D)

1.4.1 Questions

D.1	
<i>Name</i>	Reuse and sharing
<i>Category</i>	Enabler
<i>EIF-layer</i>	Organisational interoperability
<i>Weight</i>	25%
<i>Question type</i>	Multiple choice (multiple answers possible)
<i>Rationale</i>	Organisations that make available documentation and / or (software)components for reuse contribute to interoperability. ¹
<i>Question</i>	<p>Please provide insight if and how the digital public services shares components and knowledge with the external environment (multiple answers possible)?</p> <ul style="list-style-type: none">■ 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.■ None of the above.
<i>Examples</i>	The digital public service shares best practices and documentation via its website. The tax declaration digital public service makes available an open Web-API to calculate the income after taxes of a citizen – this web service can be reused by other public services e.g. in the area of social security.
<i>Question logic</i>	Next question

D.2	
<i>Name</i>	Procurement criteria
<i>Category</i>	Enabler

¹ For further information on how to foster sharing & reuse, please consult the related ISA action: https://ec.europa.eu/isa/actions/04-accompanying-measures/4-2-5action_en.htm .

<i>EIF-layer</i>	Legal interoperability; Organisational interoperability; Technical interoperability
<i>Weight</i>	10%
<i>Question type</i>	Elementary attribute
<i>Rationale</i>	A strong focus on standards contributes to higher interoperability as it avoids vendor lock-in. ¹
<i>Question</i>	<p>Have the digital public service's components been procured based on standards accessible to all ICT suppliers?</p> <ul style="list-style-type: none"> ■ No, standards have not been considered in the procurement of the service's components. ■ Partly, some components have been procured based on standards. ■ Fully, all components have been procured based on standards.
<i>Examples</i>	Standards were not a procurement criterion. Yes, procurement criteria have been detailed but not been enforced resulting in a situation where only some components comply with the desired standards.
<i>Question logic</i>	Next question

D.3

<i>Name</i>	Service choreography
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Organisational interoperability; Technical interoperability
<i>Weight</i>	10%
<i>Question type</i>	Elementary attribute
<i>Rationale</i>	A central point of control facilitates the choreography of external services and provides a single source of intelligence regarding the status of individual cases.
<i>Question</i>	<p>To what extent is the choreography of the services which are consumed and / or provided automated?</p> <ul style="list-style-type: none"> ■ Not at all, the service choreography is manual. ■ Semi-automated, there is still some manual interference in the service choreography. ■ Fully automated, no manual interference is required.
<i>Examples</i>	The service choreography is fully automated, service flows and the handling of exceptions do not require any manual intervention.
<i>Question logic</i>	Next question

¹ For further information on how to make good use of standards in procurement, please consult the related ISA action: https://ec.europa.eu/isa/ready-to-use-solutions/camss_en.htm .

D.4	
<i>Name</i>	Business process model
<i>Category</i>	Enabler
<i>EIF-layer</i>	Organisational interoperability
<i>Weight</i>	10%
<i>Question type</i>	Elementary attribute
<i>Rationale</i>	Business process definitions and rules are the basis for day-to-day collaboration, providing actionable directives that govern the service's interactions with the other services.
<i>Question</i>	<p>To what extent have the Business Processes of the digital public service been modelled?</p> <ul style="list-style-type: none">■ Processes are not modelled.■ Processes are modelled but mainly in an ad hoc way.■ Processes are modelled following Business Process Modelling standards.■ Processes are modelled following Business Process Modelling standards, where relevant modelling is done jointly with partners (of the consumed and / or shared services).
<i>Examples</i>	The collaboration business rules describe and regulate how the interaction should take place and how the communication between service owners is established by e.g. harmonizing workflow definitions and procedures around responsibility & liability, communication and usage monitoring.
<i>Question logic</i>	Next question

D.5	
<i>Name</i>	Architectural Framework
<i>Category</i>	Enabler
<i>EIF-layer</i>	Organisational interoperability, Technical interoperability
<i>Weight</i>	10%
<i>Question type</i>	Elementary attribute
<i>Rationale</i>	Using existing, common architectural frameworks ensures that the administration is leveraging best practices and designs a digital public service that is interoperable with other public services.
<i>Question</i>	<p>Has the digital public service considered an architecture framework in its design (EU, national level, international (open) standard)?</p> <ul style="list-style-type: none">■ No.■ Yes, one or multiple architecture frameworks are used.

<i>Examples</i>	The digital public service is aligned with a set of frameworks on the European-level such as EIRA (European Interoperability Reference Architecture ¹) or at a national level (such as NORA in The Netherlands).
<i>Question logic</i>	Next question

D.6

<i>Name</i>	Specification process
<i>Category</i>	Enabler
<i>EIF-layer</i>	Legal interoperability; Organisational interoperability
<i>Weight</i>	15%
<i>Question type</i>	Elementary attribute
<i>Rationale</i>	Providing an open process to establish specifications is likely to yield more interoperable results since the direct stakeholders are involved in an early stage in developing the digital public service and are able to express their specific requirements.
<i>Question</i>	<p>Has the digital public service established an (open) specification process in which administrations, citizens and businesses can participate?</p> <ul style="list-style-type: none"> ■ No, the specification process is closed. ■ Yes, stakeholders have been invited once. ■ Yes, stakeholders are invited regularly. ■ Yes, participation is open to any interested stakeholder.
<i>Examples</i>	There is a dedicated forum which is accessible for everybody to post ideas and participate in discussions on the public service; Administrations and businesses need to be invited prior to joining the specification process.
<i>Question logic</i>	Next question

D.7

<i>Name</i>	Concept definitions
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Semantic interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Use of common concepts and definitions ensures alignment between organizations.

¹ For further information on EIRA, please consult the related ISA action here: https://ec.europa.eu/isa/actions/02-interoperability-architecture/2-1action_en.htm .

<i>Question</i>	<p>To what extent are common/standardised concept definitions and controlled vocabularies (e.g. code lists, thesauri) used?</p> <ul style="list-style-type: none"> ■ No, the digital public service is using proprietary definitions and controlled vocabularies. ■ Yes, the service is based on common (open) concepts, definitions and controlled vocabularies.
<i>Examples</i>	The digital public service uses its own set of definitions for defining economic activities. The digital public service reuses NACE classifications to classify economic activities.
<i>Question logic</i>	Next question

D.8

<i>Name</i>	Service Level Agreements (SLAs)
<i>Category</i>	Manifestation
<i>EIF-layer</i>	Semantic interoperability
<i>Weight</i>	10%
<i>Question type</i>	Multiple choice (1 answer possible)
<i>Rationale</i>	Service Level Agreements give users of the digital public service certainty about the conditions under which they can use and request support for the service.
<i>Question</i>	<p>Is the digital public service subject to Service Level Agreements?</p> <ul style="list-style-type: none"> ■ No. ■ Yes, but without monitoring compliance. ■ Yes, with monitoring compliance and triggering procedures for corrective actions when required.
<i>Examples</i>	The website of the Ministry for Education clearly stipulates the service levels for applications for educational allowances. The social security institution monitors compliance of its IT service levels for retrieval of social security data by partnering institutions.
<i>Question logic</i>	Next question

1.4.2 Maturity scoring

The overall weighting of this area towards the total maturity score is 30%.

	Ad hoc (1)	Opportunistic (2)	Essential (3)	Sustainable (4)	Seamless (5)
D.1 (25%)	None	One answer ticked	Two answers ticked	Three answers ticked	Four answers ticked
D.2 (10%)	No standards in procurement		Partially standards-based procurement		Fully standards-based procurement
D.3 (10%)	Manual choreography		Semi-automated choreography		Fully automated choreography
D.4 (10%)	No BPM		Ad hoc BPM	Standards-based BPM	Standards-based and collaborative BPM
D.5 (10%)	No architectural framework				Architectural framework
D.6 (15%)	Closed specification process		Stakeholders have been invited once	Stakeholders are invited periodically (frequently)	Open specification process
D.7 (10%)	Proprietary definitions				Common (open) concepts and definitions
D.8 (10%)	No SLAs		SLAs without monitoring		Monitored SLAs and corrective action

Table 3 Scoring table: Service Management (D)

1.5 Specific Privacy Statement

The Specific Privacy Statement related to this questionnaire can be found below. Assessment of Interoperability Maturity Model (IMM) - Self-assessment Questionnaire is referred to as "consultation" in the text below.

OBJECTIVE

The objective of this consultation is to receive the views of stakeholders or people concerned by the topic of the consultation and potentially to publish them in an anonymised format on the Internet, under the responsibility of the Head of the Unit "Margarida ABECASIS", Directorate-General for Informatics, acting as the Controller.

As this questionnaire collects and further processes personal data, Regulation (EC) 45/2001, of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data, is applicable.

WHAT PERSONAL INFORMATION DO WE COLLECT AND THROUGH WHICH TECHNICAL MEANS?

Identification Data

The personal data collected such as name, surname, and e-mail addresses, will only be used for further contact in case further details regarding the data collected is necessary.

The processing operations on personal data linked to the organisation and management of this consultation are necessary for the management and functioning of the Commission, as mandated by the Treaties, and more specifically in Article 5 of TEU, Article 13 TEU and Articles 244-250 TFEU, and in accordance with Article 1 and Article 11 of TEU.

Technical information

Your reply and personal data will be collected through an online survey.

WHO HAS ACCESS TO YOUR INFORMATION AND TO WHOM IS IT DISCLOSED?

The access to all personal data as well as all information collected in the context of this consultation is only granted to a defined population of users, without prejudice to a possible transmission to the bodies in charge of a monitoring or inspection task in accordance with Community legislation. These users typically are members of DIGIT B6, as the unit organising the consultation, and its subcontractor Gartner, acting as processor.

No personal data is transmitted to parties which are outside the recipients and the legal framework mentioned.

The European Commission will not share personal data with third parties for direct marketing purposes.

HOW DO WE PROTECT AND SAFEGUARD YOUR INFORMATION?

The collected personal data and all information related to the above mentioned consultation is stored on a computer of the external contractor, acting as processor, who has to guarantee the data protection and confidentiality required by the Regulation (EC) 45/2001.

HOW CAN YOU VERIFY, MODIFY OR DELETE YOUR INFORMATION?

In case you want to verify which personal data is stored on your behalf by the responsible controller, have it modified, corrected or deleted, please contact the Controller by using the Contact Information below and by explicitly specifying your request.

HOW LONG DO WE KEEP YOUR DATA?

Your personal data will remain in the database until the results have been completely analysed and will be rendered anonymous when they have been usefully exploited, and at the latest after 1 year from the end of the consultation.

CONTACT INFORMATION

In case you wish to verify which personal data is stored on your behalf by the responsible controller, have it modified, corrected, or deleted, or if you have questions regarding the consultation, or concerning any information processed in the context of the consultation, or on your rights, feel free to contact the support team, operating under the responsibility of the Controller, using the following contact information:

Raul Abril Jimenez, Unit B6, DG Informatics

Phone: +32 2 2958003

E-mail: Raul-Mario.ABRIL-JIMENEZ@ec.europa.eu

RECOURSE

Complaints, in case of conflict, can be addressed to the [European Data Protection Supervisor](#).