

1.6 INTEROPERABILITY AGREEMENTS ON ELECTRONIC DOCUMENT AND ELECTRONIC FILE (2016.26)

1.6.1 IDENTIFICATION OF THE ACTION

Type of Activity	Common Frameworks
Service in charge	DIGIT B6
Associated Services	DG GROW, SG, DIGIT.B2, EU Publications Office, DG CONNECT

1.6.2 EXECUTIVE SUMMARY

Administrative activity is distinguished by its documentary character, in the sense that the administrative documents are evidences of their activity and the external form of such acts.

The need to exchange the above documents and files in an electronic format make necessary the establishment of interoperability guidelines about their exchange. Special consideration should be given to the context in which the object of exchange is the electronic document and not just the data it carries.

Preliminary work has been done under the ISA programme, to explore what Member State administrations try to achieve when using electronic documents and how they do it.

This will, under the ISA² programme, be extended to get a full overview and serve as the basis for the categorisation of requirements, possible solutions and interoperability issues related to these solutions, with the goal to identify areas where interoperability agreements would be useful, and consequently establish such agreements.

1.6.3 OBJECTIVES

The objective of the action is the definition of common specifications (interoperability agreements) in relation to the electronic documents and the electronic files:

- An interoperability agreement for electronic documents would define a common approach describing e-documents, including contents, e-signatures, and minimum required metadata;
- An interoperability agreement for e-files would define a common approach to the structure of e-files (being a collection of electronic documents grouped into a common context, e.g. a case), including e-documents, e-indexes, e-signatures, and minimum required metadata, and specifications on how to send and make them available.

The action aims to first establish a complete picture of solutions and standards for electronic documents and electronics files, covering the whole lifecycle of e-electronic documents and electronic files, including bundling (containers), exchange (e-Safe and others) and archiving.

This picture should be at EU and national level and in various domains (e.g. social security, taxation and maritime affairs), taking into account security, privacy and data protection and the citizen's right to data preservation. It will then serve to identify the needs / requirements and best practices, and eventually propose interoperability agreements to fulfil these requirements.

1.6.4 SCOPE

Building on the reference architecture for electronic documents that was developed under the ISA programme, the action will consider various aspects related to e-documents and identify interoperability issues where further action is needed. Different types of solutions to similar problems will be compared and their advantages and disadvantages elaborated. Where common specifications are lacking, the action will draft such specifications, building as much as possible on existing standards, and aiming at a wide range of consensus.

1.6.5 PROBLEM STATEMENT

Administrative activity is distinguished by its documentary character, in the sense that the administrative documents are evidences of their activity and the external form of such acts.

The need to establish some guidelines for interoperability in the exchange of electronic documents and electronic files is assumed, well known, and a key for interoperability. Special consideration needs to be given to a context in which frequently the object of exchange is the electronic document (with its documentary character preserved) and not just the data it carries.

Lessons learned from existing experience in establishing relevant specifications shall be taken into account.

1.6.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Commission Services	Better European Public Services especially those which are document-based.
Public Administrations	Reduction of administrative burden. Electronic documents allow for shorter processing, fewer errors, reduced printing and postage costs and, most importantly, fully integrated processing.
Business and citizens	Reduction of administrative burdens, improved users' satisfaction

1.6.7 RELATED EU ACTIONS / POLICIES

Action / Policy	Description of relation, inputs / outputs
Communication on "A Digital Single Market Strategy for Europe", COM(2015)192	The need that "... the use of electronic documents should be promoted across the EU to reduce costs and administrative burden for business and individuals" is clearly mentioned in the DSM. Also EIF (subject to revision as per DSM roadmap) includes the notion of Interoperability Agreements as a necessary element to achieve interoperability.
Services Directive	Electronic documents play an important role in the implementation of the Services Directive.
ISA Action 1.1 – Promoting semantic interoperability amongst the European Union Member States	The SEMIC action promotes semantic interoperability. The standardized document formats will therefore contribute to this direction. Specifications and recommendations identified in the context of this action will take into account SEMIC results
ISA Action 1.2 – Access to base registries	Very often e-documents are exchanged in processes related to Base Registries. The work carried out by the action has to be considered.
LSPs and other funded projects	The e-Documents building blocks from some of the "Large Scale Pilots" and other initiatives have been assessed during the first phase of the action.

1.6.8 REUSE OF SOLUTIONS DEVELOPED BY ISA, ISA² OR OTHER EU / NATIONAL INITIATIVES

The e-documents engineering method put forward in the first phase of the action was developed in cooperation with the ISA action 1.1 (SEMIC). Any future work on standardised formats will have to take into account the instruments created by the SEMIC action. Core Vocabularies in particular can play a role in the definition of e-document formats (side by side with international standards such as Dublin Core, SBDH, UN/CEFACT and UBL). Specifications developed in the Member States and coming from other funded projects (e.g. LSPs), as well as the analysis done in the context of the Services Directive will serve as input for any draft interoperability agreements.

1.6.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

Output name	Updated study on state of the art of eSafe solutions in Europe
Description	The inventory and analysis of what exists in this area in terms of existing standards and solutions actually in use in Member States and at EU level will be extended to

	cover eSafe solutions in Europe, too.
Reference	To be published on Joinup
Target release date / Status	2016

Output name	Updated and extended Reference Architecture for e-Documents
Description	Under the ISA programme, the e-Documents action has produced a reference architecture for electronic documents, based on the European interoperability Reference Architecture (EIRA). Under ISA ² , this will be finished and maintained. It is meant to enable public administrations to make informed architecture decisions when building e-document solutions.
Reference	To be published on Joinup
Target release date / Status	2016 / Status: first version published in 2015

Output name	Interoperability agreements (context dependent) for the exchange of electronic documents and electronic files.
Description	Interoperability agreements can occur on all EIF layers: organisational (e.g. agreement about mutual acceptance), semantic (e.g. minimal set of document metadata, or content schemas, technical (e.g. signature formats and containers). The format will vary accordingly.
Reference	To be published on Joinup
Target release date / Status	Q2 2017 / Status: not started

1.6.10 ORGANISATIONAL APPROACH

1.6.10.1 Expected stakeholders and their representatives

Stakeholders	Representatives
Member States	ISA ² Committee, ISA ² Coordination group (or ISA CG equivalent) and working groups
Commission Services	A representative from each concerned Commission service.

ICT	Representatives of ICT industry, SMEs
Standardisation bodies	Representatives from standardisation organisation fora and consortia.

1.6.10.2 Communication plan

Under the ISA programme, MS solutions for electronic documents and electronic files were examined. This inventory will continue under ISA² – targeted communication with experts takes place through e-mail and telephone interviews, so as to achieve a complete picture of the situation in Member States. The reference architecture for electronic documents that was also created under the ISA programme will be finalised and then further disseminated, through presentations and webinars. Draft interoperability agreements will be created with the help of a working group and be subject to a public consultation – an effort will be made to engage here specifically the owners of standards and specifications for electronic documents in Member States.

Already while drafting these interoperability agreements, the action will actively search for cooperation partners to identify specific pilots according to the recognised needs. This will help to pinpoint obstacles on the organisational layer early on.

1.6.10.3 Governance approach

The action will be managed by DIGIT with the support of an external contractor. Whenever major deliverables are to be published, the validation of the MS representatives will be sought.

This action will be run in close collaboration with the relevant ISA² working group and with the concerned Commission services. Once interoperability agreements are established, they will require a more formal governance – this will be created in a later stage of the action, depending on the nature of the agreements (based on existing work for similar types of interoperability agreements, e.g. SEMIC), and taking into account the participation of relevant stakeholders.

1.6.11 TECHNICAL APPROACH

During the inception phase, the inventory and analysis of what exists in the Member States (started under the ISA programme) will be completed as a basis to scope the next steps towards, for example, the identification of overlaps and gaps and the needs/requirements.

The e-documents reference architecture that has been created in parallel will enable identification of requirements on the different interoperability layers, including in particular aspects that are relevant to the documentary character of electronic communications, like integrity, confidentiality, non-repudiation etc.

This work will then be used to identify where definition and agreements on common templates of interoperability agreements (specifically oriented towards electronic documents and electronic files) could contribute to increase interoperability amongst EU systems.

Once some clarity about the need for agreements on the different interoperability layers has been achieved, a working group will be established to draft these agreements. The planning of pilots will begin in parallel, to ensure real-life relevance of this work.

1.6.12 COSTS AND MILESTONES

1.6.12.1 Breakdown of anticipated costs and related milestones

Phase: Inception Execution Operational	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA ² / others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Inception	Definition of scope for interoperability agreements	100	ISA ²	Q2 2016	Q3 2016
Execution- 1	Draft interoperability agreements	150	ISA ²	Q4 2016	Q2 2017
Execution-2	Pilots	200	ISA ²	Q3 2017	Q4 2017
	Total	450			

1.6.12.2 Breakdown of ISA² funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Inception Execution-1	250	
2017	Execution-2	200	

1.6.13 ANNEX AND REFERENCES

Description	Reference link	Attached document
Updated Reference Architecture for e-Documents	To be published	