

LEGISLATION INTEROPERABILITY TOOLS – LEGIT (2016.38)

Service in charge	SG.A1
Associated Services	DIGIT.B2, DIGIT B.6, Parliament, Council, Publications Office

EXECUTIVE SUMMARY

This action aims specifically at modernising and improving the efficiency and quality of the legislative process across the Union, promoting interoperability between the systems of the different actors of the process. It seeks to facilitate the cooperation between public administrations at EU, national, regional and local levels.

Given the high diversity of legislative traditions encountered across the Union and the different levels of modernisation, it would be extremely difficult to provide a universal single turnkey ICT solution that adapts to each specific context.

Instead, this action proposes an optimal solution based on reusable fundamental building blocks.

The activities covered by this action have been organised in three distinct and complementary clusters.

Cluster A: Development of a web-based legislation editor – Continuation of LEOS

The LEOS project stressed that drafting legislation in an open and standard XML format would pave the way to efficient interoperability between the different actors of the EU legislative process. After a study on tools currently used by EU and MS public administrations to write their legislation, a need for a new generation of authoring tools was raised and the LEOS prototype was released.

This prototype is a web-based authoring tool providing drafting features that enable to easily write legal texts in a controlled WYSIWYG environment, organise it in divisions (articles, chapters, sections...), compare versions, generate printable views, insert comments, highlight some parts of the texts... Stakeholders and key users evaluated the prototype, praised the achievements and highlighted incomplete or missing capabilities.

This action allows development activities necessary to make evolve the existing prototype into a stable, complete and mature product enabling users to draft EU legislation in XML.

Cluster B: Interoperable and re-usable independent products (components, services or applications)

The LEOS project and the web-based Editor prototype appeared very interesting to a diversified audience that is facing some common problems. The cluster B would allow development activities necessary to refactor the existing software prototype into more complete and re-usable building blocks released under open source licence. The development of software components or services for the validation and transformation of semantic elements defined and documented by the IFC are also contained in Cluster B.

Cluster C: Realizing the vision of the legislative process landscaping study

In September 2015 the ISA unit of the European Commission launched a study to draw a comprehensive view of the EU legislative IT environment. This study is made of:

- A description of the overall lifecycle of the inter-institutional legislative process (AS-IS), including the business processes, the systems used in each major legislative step by each of the institutions, the specifications used to exchange information, etc.
- Identification of a first set of areas where intervention is considered beneficial (TO-BE). These include areas where there are opportunities for synergies and efficiency gains, for harmonization of existing standards and specifications, for reuse or extension of tools to cover new needs. Missing pieces and solutions to create a rationalised domain are also identified and proposed for further development.

This action, via its cluster C, is funding the development of parts of the missing software components detected and highlighted in the TO-BE vision defined in the study.

Report on activities carried out in 2016

The Commission intends to launch a pilot for drafting legislation with the LEOS tool in June 2017. The scope of this pilot is the drafting of legislative proposals in the Ordinary Legislative Procedure (OLP). By June 2018, the first legislative proposals should go through the whole Commission decision-making process from preparation to adoption and would be transmitted to external partners in XML format.

In 2016, in the context of the preparation of this pilot, the LEOS editor was extended to the drafting of all types of proposals in the OLP, to their annexes and to the explanatory memorandum accompanying each proposal (see report under cluster A).

In order to assure a smooth transition to the new XML format, a module enabling to export XML proposals in the previous inter-institutional format (LegisWrite) had to be developed (see report under Cluster B). Despite a strong interest of some member States in LEOS development activities no clear request for exposing the LEOS code in more independent libraries were expressed so no other activities are reported in Cluster B for 2016.

In the context of the landscaping exercise it appeared that the "TO BE" vision would be defined in the context of the ISA2 action *Interinstitutional framework for digital OLP management (2016.17)*. Therefore in 2016 all activities covered by Cluster C have all been put on hold as long as the TO BE model had not been defined and validated.

Activities planned for 2017

As regards Cluster A, the activities will focus on the development of features enabling the drafting, the revision and the transmission of legislative documents in the Ordinary Legislative Procedure. For Cluster B, more complete and re-usable components or services of the existing software will be released under open source licence.

For Cluster C, the development of components will depend on the bottlenecks identified in the landscaping exercise and the solutions proposed in the TO-BE scenario.

The progress achieved by this action on legislation interoperability tools will contribute to the Better Regulation objectives set in the recent Interinstitutional Agreement on Better Law-Making. The results of the landscaping exercise will provide an informed basis for the design and implementation of an upcoming joint inter-institutional database of the EU institutions on the status of legislative files.

OBJECTIVES

The objectives of this action are:

- making the legislation process more efficient, proposing new interoperability solutions and replacing repetitive manual tasks at the different actors by automatic processing wherever possible;
- develop solutions for common needs, and make them available for reuse under free licence;
- support the work of inter-institutional committees (e.g. IMMC and IFC), providing reference implementations after publication of their specifications;
- ensure the consistency of different initiatives in the area of the EU decision making process, providing pieces of software necessary for better convergence and efficiency;
- promote the usage of interoperability standards by proposing technical analysis, architecture designs and reference implementations.

SCOPE

This action delivers software implementing specifications and standards defined by other bodies active in the legislation domain (e.g. standardisation committees,...).

In scope:

- Development of software supporting interoperability of the legislation process:
 - tools for drafting legislation in a structured format (XML)
 - tools for providing structured feedback on proposed legislation
 - tools for the transformation of legislation between different structured formats
 - tools supporting the electronic exchange of documents and metadata in the context of the legislative process, containing workflow information

Not in scope:

- Semantic assets for the legislative process; the definition of common vocabularies and reference tables remains under the responsibility of existing committees or initiatives (SEMIC, ELI, IMMC, IFC...)
- Definition of new standard formats for supporting the legislation process interoperability; the action will propose tools supporting formats already available on the market.

ACTION PRIORITY

Contribution to the interoperability landscape

The contribution of the action to the interoperability landscape, measured by the importance and necessity of the action to complete the interoperability landscape across the Union

Question	Answer
<i>Does the proposal directly contribute to implementing the European Interoperability</i>	Yes. The action contributes to the Better Regulation policy. One of the Better Regulation's policy goals is to remove

<p><i>Strategy, the European Interoperability Framework, or other EU policies with interoperability requirements, or needed cross-border or cross-sector interoperability initiatives? If yes, please indicate the EU initiative / policy and the nature of contribution.</i></p>	<p>bottlenecks and streamline the Commission's policy making processes. The development of a tool for drafting legislation in a structured format will facilitate the electronic exchange of documents and metadata in the context of the legislative process and improve the interoperability of the legislative process.</p> <p>The reusable software solutions delivered through the action can implement the <i>European Interoperability Strategy</i> to ensure that the outputs are shared and re-used with public administrations in Europe. The Joinup collaborative platform is used as a means for sharing the experiences as well as the deliverables of this action with the Member States' public administrations.</p>
<p><i>Does the proposal fulfil an interoperability need for which no other alternative solution is available?</i></p>	<p>Yes. This action is driven by the "landscaping exercise on initiatives in the area of the legislative process", avoiding overlaps with any other solution or project on going.</p>

Cross-sector

The scope of the action, measured by its horizontal impact, once completed, across the sectors concerned

Question	Answer
<p><i>Will the proposal, once completed be useful, from the interoperability point of view, and utilised in two (2) or more EU policy areas? If yes, which are those?</i></p>	<p>The proposal will allow interoperability of the systems supporting EU decision making process and therefore will enable to improve the quality of EU legislation across all EU policy areas.</p>
<p><i>For proposals or their parts already in operational phase: have they been utilised in two (2) or more EU policy areas? Which are they?</i></p>	<p>N/A</p>

Cross-border

The geographical reach of the action, measured by the number of Member States and of European public administrations involved.

Question	Answer
<p><i>Will the proposal, once completed be useful, from the interoperability point of view, and used by public administrations of three (3) or more EU Members States?</i></p>	<p>Public administrations from Greece, France and Spain have already shown their interest in LEOS development activities. According to the Legislation Editing Open Software (LEOS) Perceived Quality and Perceived Utility Report July 2016, issued as part of the execution of the ISA programme monitoring, the LEOS tool received a positive Perceived Utility assessment (4.07/5). According to the respondents, the LEOS tool allows its users to save costs, improve efficiency and transparency and to facilitate the interconnection of legal databases. Also, the standardisation of the format and the ability to control the workflow are key benefits. The demographic profile of the respondents comes from 6 different Member States.</p>
<p><i>For proposals or their parts already in operational phase: have they been utilised by public administrations of three (3) or more EU Members States?</i></p>	<p>N/A</p>

Urgency

The urgency of the action, measured by its potential impact, taking into account the lack of other funding sources

Question	Answer
<p><i>Is your action urgent? Is its implementation foreseen in an EU policy as priority, or in EU legislation?</i></p>	<p>Yes. As announced in the DSM strategy, the Commission plans to propose a revised European Interoperability Framework (EIF) by the end of 2016 and will support its take-up by national administrations with the aim to strengthen the interoperability of public services in the EU. "(page 5) "In view of its own digital transformation and in order to comply with the legal obligations</p>

	set out for EU public administrations, the European Commission will also undertake a number of concrete actions. One of these actions is the launch of the pilot phase for drafting legislation in the Ordinary Legislative Procedure using LEOS in 2017.
<i>Does the ISA² scope and financial capacity better fit for the implementation of the proposal as opposed to other identified and currently available sources?</i>	Yes, the implementation of legislation interoperability tools support the interactions between European Public Administrations, Businesses and Citizens and contribute to the implementation of the European Interoperability Framework and strategy, to the DSM and take into account existing results from the ISA programme (LEOS action).

Reusability of action outputs

The re-usability of the action, measured by the extent to which its results can be re-used

Can the results of the proposal be re-used by a critical part of their target user base, as identified by the proposal maker? For proposals or their parts already in operational phase: have they been re-used by a critical part of their target user base?

Name of reusable solution	LEOS software components
Description	Set of software components supporting the edition, the review, the transformation and the validation of legislation
Reference	https://joinup.ec.europa.eu/software/leos/release/all
Target release date / Status	Ad-hoc deliveries
Critical part of target user base	N/A
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	N/A

Level of reuse by the proposal

The re-use by the action of existing common frameworks and elements of interoperability solutions.

Question	Answer
Does the proposal intend to make use of any ISA ² , ISA or other relevant interoperability solution(s)?	The proposal is reusing the OASIS standard for legislative and Judiciary documents (Akoma

Which ones?	Ntoso, aka LegaldocMI)
For proposals or their parts already in operational phase: has the action reused existing interoperability solutions? If yes, which ones?	N/A

Interlinked

The link of the action with Union initiatives to be measured by the collaboration and contribution level of the action to Union initiatives such as the DSM.

Question	Answer
Does the proposal directly contribute to at least one of the Union's high political priorities such as the DSM? If yes, which ones? What is the level of contribution?	<p>The action contributes to the Better Regulation policy. One of the Better Regulation's policy goals is to remove bottlenecks and streamline the Commission's policy making processes.</p> <p>The action also contributes to A Digital Single Market for Europe and to Democratic change. The development of legislation interoperability tools is bringing down barriers to unlock online opportunities for stakeholders to participate in the law-making process.</p>

PROBLEM STATEMENT

Drafting a new legislation is a complex process, involving many actors. Usually the process follows this sequence of tasks:

- preparation phase: the "drafting" process is usually performed under the leadership of a specific public department, and the draft text is discussed with stakeholders and modified accordingly. The content and structure of the text can be continuously changed during this phase;
- adoption phase: the draft legislation is submitted to the political entities responsible for its adoption, (Council of the European Union, European Parliament, National parliaments, institutional consultative bodies....) along clearly structured processes. The text is progressively stabilising and the final version is generally emerging under the control of a central body, which takes care of the format, the legal and editorial quality of the text;
- entry into force phase (when applicable): ultimately, the text is adopted and enters into force by its publication or its notification to the concerned parties.

The EU legislation process is similar but yet more complex by two additional factors:

- the EU-level processes interact with 28 independent Member state-level processes (e.g. : The Lisbon Treaty gives a.o. to the National Parliaments a greater ability to scrutinise proposed [European Union law](#) and to comment the draft legislation proposed by the European Commission);
- EU legislation addressed to citizens needs to be translated into the official languages..

The modernisation of the decision making process, taking into account its pan-EU dimension, is beneficial for Member States and citizens as it supports:

- cost saving: decrease the number of repetitive manual tasks, decrease the volume of new text to be translated...
- transparency: better traceability of directives implementation, building of consolidated views of legislation, follow-up of amendments and corrigenda...;
- quality of the legislation: control of the legislative drafting rules from early stages of the legislative process...;
- accessibility to legislation: standard open formats, open data, data mining, long-term preservation...

EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
Member States, National parliaments, public administrations and EU Institutions	<p>Re-use of best practices, standards and tools, in order to:</p> <ul style="list-style-type: none"> ▪ improve the quality of legislation, preventing drafters to go outside the applicable legislation drafting rules ▪ save costs, replacing manual tasks by automatic processing at different step of the decision making process: <ul style="list-style-type: none"> ○ review/amending phases ○ translation phases ○ consolidations ○ publication/notification ▪ ease interoperability between the actors of the legislative process ▪ facilitate the interconnection of legal databases and the performance of search engines <p>Tools and components developed in the context of this action are designed in a generic way and published under an open source licence in order to ease their reuse by national public administrations and EU Institutions.</p>
Citizens, civil society, businesses	Easier access to legislation, providing standards and good quality data facilitating data analytics

EXPECTED MAJOR OUTPUTS

Output name	Technical analysis
Description	Research activities, feasibility study, conclusions driving solutions' implementation
Reference	N/A
Target release date / Status	Adhoc updates, depending on research activities on the agenda

Output name	Architecture design
Description	Based on the conclusions of the technical analysis, architecture guidelines driving the implementation
Reference	N/A
Target release date / Status	Adhoc updates, accompanying open source release

Output name	LEOS Editor Reference implementation
Description	Software components following the architecture guidelines, released under open licence
Reference	N/A
Target release date / Status	Ad-hoc releases as of 2016

ORGANISATIONAL APPROACH

Expected stakeholders and their representatives

Stakeholders	Representatives
IMMC	Inter-institutional Metadata Maintenance Committee
IFC	Inter-institutional Formats Committee
Akoma Ntoso/LegalDocML Oasis Technical Committee	https://www.oasis-open.org/committees/tc_home.php?wg_abbrev=legaldocml
ISA ² Coordination Group (or ISA CG equivalent)	The group assists the Commission in translating priorities into actions and to ensure continuity and consistency in their implementation.
Secretariat-General of the European Commission	Unit SG.A1 (Advice and Development) Unit SG.R3 (Information Technology)
Legal Service of the European Commission	LEG Team (Quality of Legislation) Unit SJ.RHIF.IT (Informatics)
Directorate-General for Translation of the European Commission	DGT.C (Translation) and DGT.S (Customer relations) Unit DGT R3 (Informatics)

Directorate General for Informatics of the European Commission	Unit DIGIT.B.2 (Information systems for document management and corporate decision making processes)
Organisations in Member States	Members States representatives of administrations either working on similar initiatives or interested in using produced software.

Identified user groups

- Legislation drafters (Commission services): these people will use the editor for their day-to-day work. They participate to workshops organised by the Secretariat- General of the Commission in order to provide feedback on features.
- Users from EU institutions and Member States involved in EU law-making.

Communication plan

The project team will systematically drive development activities after consultation of interested parties. As example, committees like the IMMC and the IFC will be consulted before launching any development activities in the area of transformation between formats or the implementation of new metadata extension. The communication with these committees will be handled during the respective meetings (plenary or working group meetings) in which presentations for information or for discussion will be put on the agenda.

As regards the development activities related to the LEOS drafting tool, the Joinup platform will be used to support the communication and the dissemination of material (software, documents...) between interested stakeholders. In case a community of interest is emerging (made of representatives of some national organisations and Institutions working on similar projects) some workshops could be organised in order to share experiences (lessons learnt, technical issues, change management strategies...) and also to identify and plan development synergies, the Joinup platform being also able to support collaborative development activities.

Governance approach

The coordination of the project is handled by 3 different groups:

- The steering committee, including representatives at head of unit level of:
 - Secretariat-General of the Commission (SG.A1 service in charge)
 - DIGIT.B2 and DIGIT.B6 (associated services)
- The project management team, including project officers from:
 - Secretariat-General of the Commission (SG.A1 service in charge)
 - DIGIT.B2 and DIGIT.B6 (associated services)
- The extended project management team, including project officers from:
 - Secretariat-General of the Commission (SG.A1 service in charge)
 - DIGIT.B2 and DIGIT.B6 (associated services)
 - DGT (adviser service)
 - Legal Service of the Commission (adviser service)

The project steering committee meets on a regular basis (2 times a year):

- to ensure the project is progressing satisfactorily
- to take strategic decisions

In case any critical risk or issue is raised, the steering committee may also meet on request of the project managers, in order to decide on actions to be launched.

Project status meetings (review of the project progress) are held between entities of the project management team, to ensure the timely delivery of the project. Project managers of the extended project management team may join the status meeting depending on the agenda.

TECHNICAL APPROACH AND CURRENT STATUS

Technical approach

The swift implementation and deployment of complementary, standardised and interoperable ICT solutions is a critical element to drive innovation, ensure sustainability, increase re-usability, reduce fragmentation and avoid duplication of efforts.

This action is driven by an agile, efficient and pragmatic technical approach by combining established and emerging standards, industry best practices and state of the art technologies to empower the delivery of high quality and highly reusable software products that can either be used in isolation or composed together to implement interoperable ICT solutions. Reliable and sound ICT solutions are essentially achieved by composing independent products (components, services and even applications), leading to strong architectures and resilient systems. These are better prepared to deal with failures by providing graceful degradation of the affected capabilities and guaranteeing overall system availability.

Independent products, complying with the principle of single responsibility, translate to sustainable evolution in both business and technical perspectives. Independent teams are masters of their own business specificities. Usually they are focused on a particular business domain inside an organization, easily coping with business changes, able to avoid the barriers and coordination overhead of dealing with a large and complex organizational structure, inevitable when addressing a wider business domain. Independent products are supported by independent teams, which are establishing well-defined boundaries and focusing on contracts, interfaces, communication and data. These are key concepts to achieve unconstrained product evolution, responding to business changes by incorporating new features and capabilities or deprecating obsolete ones, but still maintaining backwards compatibility. Single responsibility products have clearly defined behaviour and are designed to be easy to understand, to test and to validate against predefined key metrics. Each product should be enriched with instrumentation capabilities to report meaningful usage and performance statistics as an added value.

Software components (frameworks or utility libraries) should be implemented at least in one mainstream programming language (e.g. Java), with the possibility to provide bridge application programming interfaces (APIs) for other languages. This strategy ensures sustainable development of a main reference implementation, high re-usability through thin bridge APIs and lower maintenance efforts.

Software services (SOAP web services, RESTful services or micro-services) should exchange data in well-defined open formats. The focus is on the exchange of rich data structures where data, together with its schema, is fully self-describing. Such principle is the strongest foundation to build reliable data exchange and processing systems where producers and consumers can exchange data schemas, facilitating the understanding of the exchanged data and enabling seamless data adaptation to comply with divergent schema versions or even disparate schemas altogether. This strategy ensures easier consumption and flexible composition of services, independently of programming languages and execution platforms.

The LEOS Editor is considered a single responsibility application, reusable in multiple stages of the legislative process workflow, as demonstrated by the delivered prototype implementation. Activities performed under the LEOS action focused on improving the drafting of legislation using open source tools and an open document format. Rapidly we faced several, apparently unrelated, hidden challenges for which solutions were found and implemented. Later we identified these as common problems, in different contexts, waiting for coherent solutions. We realized the opportunity and usefulness of exposing LEOS internal implementations in the form of reusable software components or services to support other efforts. The continuation of the LEOS development activities requires an adaptation of the current architecture to adhere to a design based on reusable components and services. Lessons learned from the LEOS action guide the re-evaluation of some design decisions and applied technologies, leading to the selection of suitable replacements, where needed. Stakeholders and key users evaluated the LEOS Editor prototype and highlighted missing capabilities required to properly support their business and ease adoption. Such capabilities should be delivered in new releases, involving technical analysis, design and implementation. Standards compliance is always a major concern in LEOS and the release of LegalDocML by OASIS (a.k.a Akoma Ntoso 3.0) must be covered by an upcoming release.

Current status

The activities covered by this action have been organised in three distinct and complementary clusters:

Cluster A: Development of a web-based legislation editor – Continuation of LEOS

The LEOS project (action 1.13 of the ISA program) stressed that drafting legislation in an open and standard XML format would pave the way to efficient interoperability between the actors of the legislative process and would enable to automate some legislation processing currently performed manually at each step of the process (translation, amendment phases, consolidation, publication...). After a study on tools currently used by EU and MS public administrations to write their legislation, a need for a new generation of authoring tools was raised and the LEOS prototype was released under the EUPL licence at <https://joinup.ec.europa.eu/software/leos/description>. This prototype is a web-based authoring tool providing drafting features that enable to easily write legal texts in a controlled WYSIWYG environment, organise it in divisions (articles, chapters, sections...), compare versions, generate printable views, insert comments, highlight some parts of the texts ... Stakeholders and key users evaluated the prototype, praised the achievements and highlighted incomplete or missing capabilities required to properly support their business and ease adoption. This action is supporting development activities necessary to make evolve the existing prototype into a stable, complete and mature product enabling users to draft EU legislation in XML.

Cluster B: Interoperable and re-usable independent products (components, services or applications)

Exposure of the LEOS project and the web-based Editor prototype revealed substantial interest from a diversified audience that is facing some common problems, in one way or another. LEOS has devised and implemented solutions to those problems that could be extended in a more flexible or generic way, exposed as independent products (components or services) easily re-useable in different business applications or technical contexts. The cluster B is a container for development activities necessary to refactor the existing software prototype into more complete and re-usable building blocks released under open source licence. The development of software components or services for the validation and transformation of semantic elements defined and documented by the IFC are also contained in Cluster B.

Cluster C: Realizing the vision of the legislative process landscaping study

In September 2015 the ISA unit of the European Commission launched a study to draw a comprehensive view of the EU legislative IT environment, characterized by a high degree of complexity and by recent new initiatives. This study is made of:

- A description of the overall lifecycle of the inter-institutional legislative process (AS-IS), including the business processes and roles, the technologies, tools and systems used in each major legislative step by each of the institutions, the specifications used to facilitate the structuring and exchange of information, the governance bodies and committees involved, and any other relevant information;
- Identification of a first set of areas where intervention is considered beneficial (TO-BE). These include areas where opportunities for synergies and complementarities are present, mapping efforts could harmonise existing standards and specifications or tools could be reused or extended to cover new needs. Missing pieces and solutions to create a rationalised domain are also identified and proposed for further development.

This action, via its cluster C, is funding the development of parts of the missing software components detected and highlighted in the TO-BE vision defined in the study.

Report on activities carried out in 2016

In June 2016, the European Commission decided to plan a pilot for drafting legislation with the LEOS tool. The scope of this pilot is the Ordinary Legislative Procedure, the main legislative process enabling the Commission to propose to co-legislators some Proposals for Directives and Proposals for Regulations. The first phase of this pilot (to be delivered in June 2017) covers the initial drafting of these proposals and a second phase planned for June 2018 will address the various review phases taking place during the whole Commission decision-making process from preparation to adoption of the Proposals and the transmission to external partners in XML format.

In order to achieve the objective of the first phase, the LEOS editor had to be extended to the drafting of all types of Proposals, to their Annexes and to the Explanatory memorandum accompanying each Proposal. These 2016 development activities are reported under Cluster A.

In order to assure a smooth transition to the new XML format, a module enabling to export these XML Proposals in the previous inter-institutional format (LegisWrite) had to be developed. This activity is reported in the context of Cluster B. Despite a strong interest of some member States in LEOS development activities (Greece, France, Spain, ...) no clear request for exposing the LEOS code in more independent libraries were expressed so no other activities are reported in Cluster B for 2016.

In the context of the landscaping exercise it was decided that the "TO BE" vision would be defined in the context of the ISA2 action *Interinstitutional framework for digital OLP management (2016.17)*. Therefore in 2016 all activities covered by Cluster C have all been put on hold as long as the TO BE model had not been defined and validated.

Activities planned for 2017

As regards Cluster A, the activities will focus on the development of features enabling the drafting, the revision and the transmission of legislative documents in the Ordinary Legislative Procedure. For Cluster B, more complete and re-usable components or services of the existing software will be released under open source licence.

For Cluster C, the development of components will depend on the bottlenecks identified in the landscaping exercise and the solutions proposed in the TO-BE scenario.

The progress achieved by this action on legislation interoperability tools will contribute to the Better Regulation objectives set in the recent Interinstitutional Agreement on Better Law-Making. The results of the landscaping exercise will provide an informed basis for the design and implementation of an upcoming joint inter-institutional database of the EU institutions on the status of legislative files:

COSTS AND MILESTONES

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	Project charter	100	ISA ²	Q2/2016	Q3/2016
Execution 1	Technical analysis 1.0 Architecture design 1.0 Reference Implementation V1.0	400	ISA ²	Q3/2016	Q3/2017
Execution 2	Technical analysis 2.0 Architecture design 2.0 Reference Implementation V2.0	661	ISA ²	Q3/2017	Q3/2018
Execution 3	Technical analysis 3.0 Architecture design 3.0	240	ISA ²	Q3/2018	Q3/2019
	Reference Implementation V3.0	840	ISA ²	Q3/2018	Q3/2019
Execution 4	Technical analysis 4.0 Architecture design 4.0	240	ISA ²	Q3/2019	Q3/2020
	Reference Implementation V4.0	840	ISA ²	Q3/2019	Q3/2020

Execution 5	Technical analysis 5.0 Architecture design 5.0	240	ISA ²	Q3/2020	Q3/2021
	Reference Implementation V5.0	840	ISA ²	Q3/2020	Q3/2021
	Total	4401			

The governance board of the action will regularly review this allocation based on the decided business priorities.

Breakdown of ISA funding per budget year

2016	Inception	100	0
2016	Execution 1	400	500
2017	Execution 2	661	
2018	Execution 3	1080	
2019	Execution 4	1080	
2020	Execution 5	1080	