

CIRCABC (2016.34)

IDENTIFICATION OF THE ACTION

Service in charge	DIGIT A3
Associated Services	DIGIT C

EXECUTIVE SUMMARY

The CIRCABC project delivers a web application and related services enabling the collaboration, communication and documents exchange between many types of European entities like Member States Administrations, Businesses, Citizens, European institutions, centralised or decentralised bodies:

The CIRCABC user's population (176.000+ users) is in majority (80%) from member states.

This document provides an overview of the current project situation and expresses needs for its evolution:

- Service sustainability
- Improve the User eXperience
- Increase the interoperability capabilities

Key CIRCABC 2015 figures are (delta's versus 2014 figures are presented between quotes):

- **3800+ active groups (+5%)**
- In July 2016, around 1000 Service Help-Desk calls for CIRCABC, **-30%** vs July 2015 (1525)
- **176.000+ users (+7%)** and **2.600.000+ (+6%)** published **documents** (4.2TB+ of data)

CIRCABC is used by:



Based on the execution of the ISA work Programme 2010-2015, the feedback of the CIRCABC Perceived Quality Survey and the evolution of document management systems/collaborative needs in general, the challenges of CIRCABC now are mostly building further upon the groundwork done so far:

- Use the new User Interface to develop new functionalities
- Use the new Architecture to improve the responsiveness and robustness of the service
- Take advantage of the new technology to be more reactive in implementing user requests (Agile methodologies)
- Offer a professional, dynamic support with modern training materials

The yearly operational costs for CIRCABC remained constant despite an increase in activity.

OBJECTIVES

CIRCABC (Communication and Information Resource Centre for Administrations, Businesses and Citizens) is deployed both in Member States and as a central service, at the European Commission.

It allows easy cross-border and cross-sector interactions and is a heavily used reference in this context.

The objective of this submission is to:

- Enable the maintenance and service continuity
- Guarantee a reliable and effective service to the end-users, including support and documentation
- Treat current and coming business needs (functional requests from external parties)
- Offer new services in the area of Interconnectivity, User eXperience, Reporting and Archiving

SCOPE

CIRCABC enables widespread collaborative groups to share information and resources in private workspaces.

It is an open-source multilingual application offering publication, distribution and management of documents in any format, with fine grained security. It includes version control, management of translations, multilingual search, forums and is widely accessible to users with disabilities.

CIRCABC contributes to the implementation of many EU cross border and cross sector priorities both inside Institutions and in Member States by providing them with a trustable and **easy to use collaboration, information and document exchange repository.**

As reported by the EIIIS study, CIRCABC's architecture and its availability under the EUPL license **enables its reuse as an interoperable building block for other solutions. It can be deployed as a standalone alternative in EU Administrations or Businesses.**

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 Strategy, the European Interoperability Framework,</i>	CIRCABC enables widespread collaborative groups to communicate, share information and resources in private workspaces.

<p><i>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>By design, CIRCABC is a real driver for communication, integration and interoperation between various, heterogeneous types of stakeholders like other IT tools/services, administrations, public services, businesses, citizens, associations, private initiatives etc. It offers the technical (Web Services, SOA architecture, Interfaces) and functional (organized in Building Blocks) means for all those entities to be able to interact.</p> <p>Additionally it includes a number of open/public services based on recognized IT standard protocols for communication and information exchange.</p>
<p><i>Does the proposal fulfil an interoperability need for which no other alternative solution is available?</i></p>	<p>CIRCABC contributes to the implementation of many EU cross border and cross sector priorities, both inside institutions and in member states by providing them with a trustable and easy to use collaboration, information and document exchange repository.</p> <p>The EUPL license enables its reuse as an interoperable building block for other solutions. It can be deployed as a standalone alternative or consumed as a service.</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 collaborative nature of CIRCABC makes it cross-sector by definition. It is re-used in many sectors and its objectives are to facilitate the communication and integration of entities belonging to different ones.</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>CIRCABC is used in the majority of EU policy areas in order, for example for expert groups to collaborate on initial draft 'legislation' before it goes through the decisional process.</p> <p>CIRCABC covers from agriculture to statistics, trade, joint initiatives-researches, health, justice and many others.</p>

Cross-border

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

Question	Answer
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?	Yes. A majority of the European Union institutions & bodies are using CIRCABC. There are also a few public administrations, businesses and associations consuming CIRCABC either as a service or as a reused brick in their own Information System.
For proposals or their parts already in operational phase : have they been utilised by public administrations of three (3) or more EU Members States?	CIRCABC is used in most (if not all) European Union Countries and beyond. Examples of CIRCABC Open Sources instances: - Germany : Bundesnetzagentur, Land Nordrhein-Westfalen, Bundesverwaltungsamt BVA, Brandenburgischer IT-Dienstleister ZIT-BB, Bundesagentur für Verbraucherschutz und Lebensmittelsicherheit, Land Sachsen. - Austria : Umweltbundesamt Österreich - Spain : Universidad Rey Juan Carlos, Generalitat Valenciana, Spanish Government. - Greece : Government: Inter-service Consultations - Finland : European Chemical Agency (ECHA) deployed Secure-CIRCABC Number of geographically spread users in the system: 140.000+ out of 170.000+ are external.

Urgency

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

Question	Answer
Is your action urgent? Is its implementation foreseen	CIRCABC fulfils each point mentioned as

<p><i>in an EU policy as priority, or in EU legislation?</i></p>	<p>objective of the ISA² programme.</p> <p>It acts as a mean for modernising the public sector; it implements standards in terms of communication and information exchange protocols in order to be easily interoperable (integration capabilities/interfaces via web services); it facilitates cross-border and cross-sector collaboration amongst a large variety of stakeholders (including Member States); it is fully reusable as a complete standalone open source tool or some building blocks of the tool could be reused (EUPL licensing model) or as a service.</p> <p>It is widely used by the European Union institutions & bodies, administrations, businesses and policy makers who have to be more and more agile and responsive towards the collaboration with their stakeholders contributing from all around the world.</p> <p>These contributors are in need of intuitive, reliable and modern tools suited to the fast pace they are confronted with: these automated productivity tools should enable them to concentrate on core business activities.</p> <p>CIRCABC is critical for these organizations to continue their mission to serve citizens from the member states, and it is therefore critical to sustain this service and continue to distribute up-to-date OSS versions.</p>
<p><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></p>	<p>The ISA² programme fits this proposal perfectly, as the objective is to consolidate, promote and expand the previous activities performed on CIRCABC under the ISA programme.</p>

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	CIRCABC
Description	CIRCABC is distributed as Open Source Software. It is reusable on its own as a full package. Building blocks inside CIRCABC may be re-used as well but first need to be isolated.
Reference	https://joinup.ec.europa.eu/software/circabc/home
Target release date / Status	Released – v3.6 in 2014 v3.7 in 2015 v3.8 in 2016 v3.9 in 2017
Critical part of target user base	Any entity in need of a document sharing and collaborating system
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	Number of open source instances in contact CIRCABC Support Team: 14

Name of reusable solution	CIRCABC as an external repository
Description	The services offered by CIRCABC also allow its usage as a simple external repository. It features multiple ways of interacting with the repository through services: - Web Services - FTP – File Transfer Protocol - WebDAV - CMIS
Reference	https://joinup.ec.europa.eu/software/circabc/home
Target release date / Status	Released – Web Services/FTP/WebDAV since 2012 and in constant evolution (implementing more and more services/possibilities to ease and complete the offer CMIS in 2016. Integration possibilities with other repositories (Sharepoint and Documentum)
Critical part of target user base	Any entity in need of a document repository service
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	Examples: Webservices: Integration with IAM – Manage memberships (RTD) ; Publish document in external repository (ARES, HERMES), Integration of automatic translation tools (MT@EC, Google Translate, Microsoft Translate) CMIS: Synchronization of a Sharepoint instance with a CIRCABC Interest Group FTP/WebDAV: A few groups manage their files via FTP (use of automatic uploads) or WebDAV

Name of reusable solution	CIRCABC as a service
Description	An instance of CIRCABC is hosted at the European Commission Data Centre and can be used by any European citizen or entity.
Reference	https://circabc.europa.eu
Target release date / Status	Released Constant upgrades (approx. each 6 months)
Critical part of target user base	Any entity in need of a document sharing and collaborating system hosted in a trusted EC environment.
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	The European Commission is also using it with 3.800+ active groups (cross-sector and cross-border) Figures: 3800+ active groups (+5%) 176.000+ users (+7%) 25.000+ different entities (administrations, companies, businesses)

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)? Which ones?	ISA 1.4 ECAS-Stork integration used to provide another user authentication mechanism (national e-ID) ISA 2.8 Machine Translation: consumed to offer automatic machine translation of working documents ISA 2.9 Document Repository Services: Integration with the Hermes Repository Services in order to offer the possibility to publish directly from CIRCABC to another external repository. Here Hermes. ISA ² 20 – Joinup – Sharing IT Solutions: Consumed to publish and communicate around the action. ISA ² 35 - EUSurvey Online Consultations
For proposals or their parts already in operational phase: has the action reused existing interoperability solutions? If yes, which ones?	Yes, all of the above.

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?	By offering a support of information and documentation exchanges between heterogeneous parties, the action facilitates considerably the communication of expert groups for any of the Union's priorities. For example a Brexit Interest Group or one for the Greece Task Force were created.

PROBLEM STATEMENT

There is a need for a general-purpose communication and document management solution, managed by a public European body (such as the Commission), which Member States and Citizens can trust.

Service sustainability

The CIRCABC service and the CIRCABC OSS version disseminated via the Joinup source forge are heavily used by several Institutions, administrations and businesses.

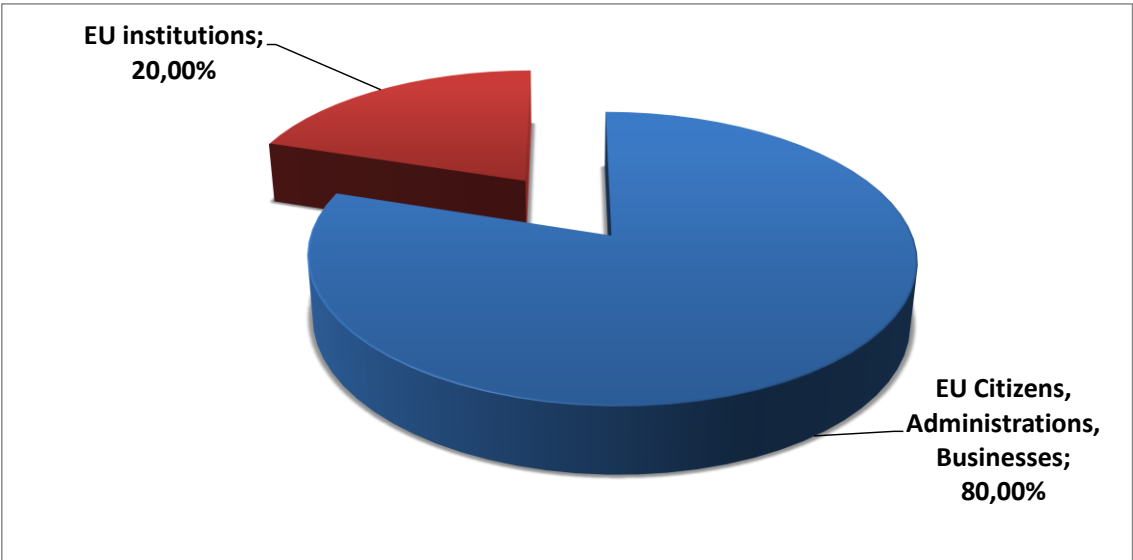


Figure 1: CIRCABC usage breakdown

CIRCABC is critical for these organizations to continue their mission to serve citizens from the member states, and it is therefore **critical to sustain this service** and continue to distribute up-to-date OSS versions.

The European Commission, administrations, businesses and policy makers have to be **more and more agile and responsive** towards the collaboration with their stakeholders contributing from all around the world.

These contributors are in need of intuitive, reliable and modern tools suited to the fast pace they are confronted with: these automated productivity tools should enable them to concentrate on core business activities.

New challenges

During the course of the 2010-2015 Programme, CIRCABC has been continuously improved.

One of the major achievements was the successful migration of CIRCA to CIRCABC. This migration significantly increased the exchange and use of information.

As a result, important efforts were provided in improving the application performance, functional capabilities and handling of new customer requirements.

A few examples:

- Backward compatibilities and new features
- Improvements in stability and responsiveness
- Management of interest groups
- Internal reporting and administration tools

CIRCABC aligns to the evolution of the versions of Alfresco, in order to stay up to date in terms of performance and security.

During the year 2015, CIRCABC was upgraded with:

- A New Architecture (further decoupling the user interface from upgrades of Alfresco versions)
- A New User Experience has been defined and is currently under development
- Better performance characteristics due to dedicated document and indexing processing servers

Based upon both the feedback received from the CIRCABC Perceived Quality Survey and via the evolution of document management systems/collaborative needs, the following high level requirements have emerged:

Service Pack

- [**User eXperience**] Take advantage of the new UI to provide new features and facilitate the use of CIRCABC. The priorities are defined according to user feedback.
 - **A 'Smart CIRCABC' package** related to a Notification mechanism, UI interactivity, Interest Groups customization and to improvements in the activity reporting service.
Taking advantage of the fast evolution of web technologies, this package offers new practical features (ergonomical), as well as facilitating the work of the CIRCABC users.
 - **A Mobile application & Responsive User Interface** (i.e. a mobile ready website)
*Access your document; make comments etc. from a mobile device. As mobile devices are taking a more and more important role in the digital world (~39% of all web traffic is caused by mobile devices), it will become **inevitable** to adapt and optimize our User Interface to interact with different **mobile platforms***
 - **New features: Workflows & tasks**, Access Control List, 'Rich' Interest Group templates, In-App Messaging, **Automatic Translation Module**

Our customers are regularly asking for new features. The CIRCABC's capabilities in term of document management are quite advanced, but some key features could help the users, even more.

This package focuses on community & organisational features.

- **Archiving**
Some groups use the tool as an active publication system, whereas others are asking for an archiving system, to simply store and freeze documents' versions, Interest Groups Status.
- **[Interoperability]** More and more requests to integrate with CIRCABC through different means
 - **'Social' package** to analyze and enable the integration possibilities with social networks (twitter, google, ...)
In order to improve the community aspect of CIRCABC, the major social network should be integrated within the application to extend its communication channels.
 - **'EC applications'**, to analyze the integration possibilities with the **e-Signature action** (1.9 Supporting tools for TSL (Trust-service Status Lists) and e-signature creation/verification), with printable document format generation, and with the EU-Survey tool (action 2.6).
Take advantage of the satellite services that the EC is currently offering. (CIRCABC could use the electronic signature system or another network tool already used by the EC staff)

Performance Pack

- **[Hardware]** Regularly upgrading the architecture in order to cope with the increasing use
 - **Database clustering, Indexation, a separate Archiving & Business Intelligence/Monitoring server**
The application usage is quite active and growing. In order to cope with the constant growth of the traffic and to provide a good quality of service, a new management tool has to be set up. This will help maintain a highly efficient service.
 - **Horizontal scaling**
Adding new nodes to the current system to keep/increase the service's performance.
- **[Software]** Regular software upgrades from the building blocks
 - Migrate to a better-performing search engine (**SOLR instead of Lucene**)
A new index engine (vs Lucene) will be more accurate, efficient and flexible e.g. with regards to searches in an Interest Group.
 - Alfresco upgrades
Follows our constant effort the keep the tool in sync with the latest features and security updates delivered by Alfresco.

EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Institutions & bodies	The CIRCABC service is readily available to the European Institutions to ease the collaborative work around policy and projects along the lifecycle of documents. They have the possibility to do local deployments.

Member States' public administrations, businesses, citizens	Member State public administrations and businesses are the main target who benefit from the CIRCABC service either for collaboration within the EU framework or for other purposes or who can decide to deploy the OSS version in their services.
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EXPECTED MAJOR OUTPUTS

Output name	Updated CIRCABC
Description	CIRCABC is distributed as Open Source Software. It is reusable on its own as a full package. Building blocks inside CIRCABC may be re-used as well but first need to be isolated.
Reference	2016-2017-2018
Target release date / Status	Released

ORGANISATIONAL APPROACH

Expected stakeholders and their representatives

Stakeholders	Representatives
ISA programme management	DIGIT.B6 (Margarida ABECASIS)
European Institutions, Member State Administrations and businesses	ISA management committee, ISA working group
DIGIT A	Philippe VAN DAMME (Acting Director), Roberto BARCELLAN, Henri PUTSEYS , Olivier HOICHE, Benoît ORIGAS
DIGIT C	Philippe VAN DAMME

Identified user groups

Communication plan

Event	Representatives	Frequency of meetings / absolute dates of meetings?
User Group Conference	Olivier HOICHE, Benoît ORIGAS, Margot FASSIAN	Once a year
ISA events	Olivier HOICHE, Benoît ORIGAS, Margot FASSIAN	Presentation to specific key stakeholders from Member States (dates to be determined)

Governance approach

The approach and governance of the project is structured around 3 groups: the ISA Coordination Group, the Project Management Group and the Users Group.

- The **ISA Coordination Group** assists the Commission in translating priorities into actions and ensures continuity and consistency in their implementation.
The ISA Coordination Group will meet each month (?) to ensure coordination and involvement of services in the project coordination group and ISA.

- The **Project Management Group** (DIGIT A3) will be used to bridge the perspectives between the internal stakeholders.
Regular project review meetings (review of project progress), alternating with team meetings (review of the individual tasks) will be held to ensure timely delivery of the project.
DIGIT A contracts external resources for service management, development, maintenance, community management, trainings and help-desk support.
DIGIT A provides a Service/Project and Communication Manager.

- The **'Users Group'**: Based on actual needs and to bridge better the technical and the business aspects, a 'Users Group' has been set up.
It is used to consult the users, when additional information and clarification is required, to provide the opportunity to submit **enhancement requests**, exchange opinions and best practices.
Meetings of the 'Users Group' will take place on an as needed frequency.

TECHNICAL APPROACH AND CURRENT STATUS

The technical approach is following an adapted **Agile version of the RUP@EC** methodology and is based on a three-step workflow: Inception, Execution and Operational. Those three steps are cycling as often as required to meet the expressed user needs.

The primary concern of the Team is the continuous improvement of the products maintained. The improvement of the products is done by deploying new revisions, called product versions, at regular intervals. Individual tasks, to be implemented within a product version, are combined into work packages called Sprints.

A Sprint usually takes 4 weeks and covers the time required to conduct the following tasks:

1. Implement specified behavior
2. Test the implementation
3. Deploy the result of the implementation.

The mentioned time is usually spent on the following tasks:

- Development of a set of tasks – 3 weeks, including :
 - Requesting and integrating label translations
 - Development of automated tests
- Functional and acceptance testing (Testing) – 1 week

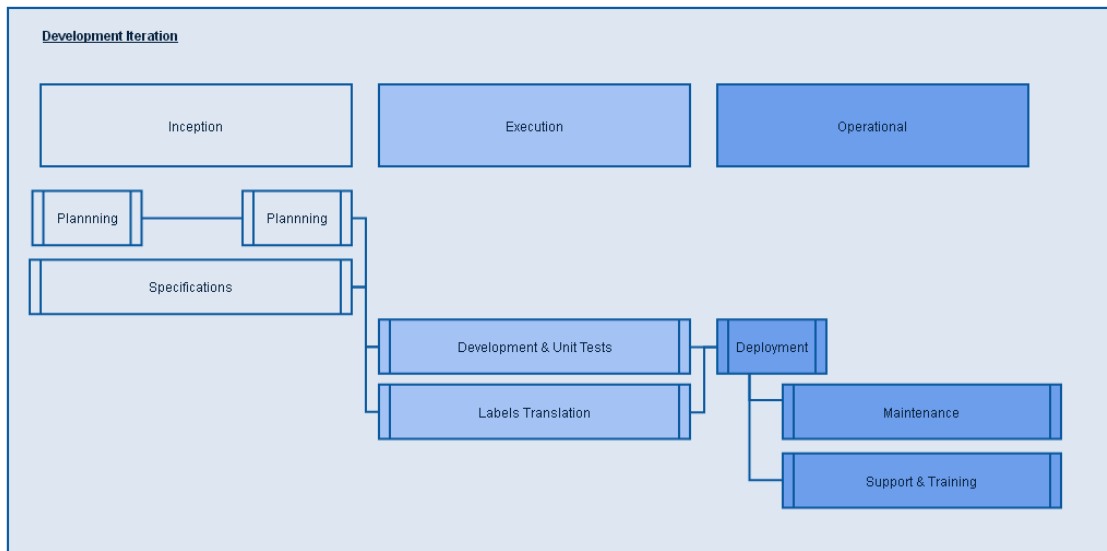


Figure 2: Development cycle

CIRCABC is also delivered as an OSS package via Joinup, the Forge made available by ISA. The OSS community has the possibility to actively contribute to the source code.

COSTS AND MILESTONES

Breakdown of anticipated costs and related milestones

Phase: Initiation Planning Execution Closing/Final evaluation	Description of milestones reached or to be reached	Anticipated Allocations (KEUR)	Budget line ISA/ others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Operational	Continuation of current CIRCABC Service	250	ISA ²	Q1/2016	Q4/2016
Inception Execution	Service Pack	100	ISA ²	Q1/2016	Q4/2016
Inception Execution	Performance Pack	50	ISA ²	Q1/2016	Q4/2016
Execution	Communication & Trainings	50	ISA ²	Q1/2016	Q4/2016
Operational	Continuation of current CIRCABC Service	180	ISA ²	Q1/2017	Q4/2017
Inception Execution	Service Pack	70	ISA ²	Q1/2017	Q4/2017
Inception Execution	Performance Pack	45	ISA ²	Q1/2017	Q4/2017
Execution	Communication & Trainings	50	ISA ²	Q1/2017	Q4/2017
Operational*	Continuation of current	350	ISA ²	Q1/2018	Q4/2018

	CIRCABC Service				
Inception Execution*	Service Pack	100	ISA ²	Q1/2018	Q4/2018
Inception Execution*	Performance Pack	50	ISA ²	Q1/2018	Q4/2018
Execution*	Communication & Trainings	50	ISA ²	Q1/2018	Q4/2018
Operational*	Continuation of current CIRCABC Service	350	ISA ²	Q1/2019	Q4/2019
Inception Execution*	Service Pack	50	ISA ²	Q1/2019	Q4/2019
Inception Execution*	Performance Pack	50	ISA ²	Q1/2019	Q4/2019
Execution*	Communication & Trainings	50	ISA ²	Q1/2019	Q4/2019
Operational*	Continuation of current CIRCABC Service	350	ISA ²	Q1/2020	Q4/2020
Inception Execution*	Service Pack	50	ISA ²	Q1/2020	Q4/2020
Inception Execution*	Performance Pack	50	ISA ²	Q1/2020	Q4/2020
Execution*	Communication & Trainings	50	ISA ²	Q1/2020	Q4/2020

Breakdown of ISA funding per budget year

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	Inception	75	
2016	Operational	250	
2016	Execution	125	
2017	Inception	295	
2017	Operational		
2017	Execution		