8.6 CIRCA:BC (2016.34)

8.6.1 IDENTIFICATION OF THE ACTION

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Common Services – Communication with citizens Reusable Generic Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service in charge</td>
<td>DIGIT A3</td>
</tr>
<tr>
<td>Associated Services</td>
<td>DIGIT C</td>
</tr>
</tbody>
</table>

8.6.2 EXECUTIVE SUMMARY

The CIRCA:BC 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 CIRCA:BC user’s population (almost 160,000 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 CIRCA:BC 2014 figures are (delta’s versus 2013 figures are presented between quotes):

- 3500+ active groups (+10%)
- Around 2300 Service Help-Desk calls for CIRCA:BC in 2014 (-40%)
- 157,000+ users (+10%) and 2,350,000+ (+7%) published documents (3.5TB+ of data)
- 60 trainings (325+ persons trained in 2014) and 10+ personal trainings & presentations given

CIRCA:BC is used by:
Based on the execution of the ISA work Programme 2010-1015, 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.

8.6.3 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
8.6.4 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 fined 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 EIIS 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.

8.6.5 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.

8.6.5.1 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](image)
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.

### 8.6.5.2 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 last year (2014-2015), 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 a dedicated document processing server

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


  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.*

### 8.6.6 EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

<table>
<thead>
<tr>
<th>Beneficiaries</th>
<th>Anticipated benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Institutions &amp; bodies</td>
<td>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.</td>
</tr>
<tr>
<td>Member States' public administrations, businesses, citizens</td>
<td>Member State public administrations and businesses are the main target who benefit from the <strong>CIRCABC service</strong> either for collaboration within the EU framework or for other purposes or who can decide to deploy the <strong>OSS version</strong> in their services.</td>
</tr>
</tbody>
</table>

### 8.6.7 RELATED EU ACTIONS / POLICIES

<table>
<thead>
<tr>
<th>Action / Policy</th>
<th>Description of relation, inputs / outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.6 EUSurvey</strong></td>
<td>Online survey tool, another ISA action (2.5)</td>
</tr>
<tr>
<td><strong>2.9 Document repository Services</strong></td>
<td>Document repository services for EU policy support through the HERMES repository.</td>
</tr>
<tr>
<td><strong>ISA Action 1.4 – ECAS-STORK</strong></td>
<td>In order to authenticate by means of the national e-ID.</td>
</tr>
<tr>
<td><strong>2.8 Machine Translation Service</strong></td>
<td>A translation service allowing you to quickly check the general meaning of incoming information</td>
</tr>
</tbody>
</table>
8.6.8 REUSE OF SOLUTIONS DEVELOPED BY ISA, ISA² OR OTHER EU / NATIONAL INITIATIVES

See 8.6.7 RELATED EU ACTIONS / POLICIES

8.6.9 EXPECTED RE-USABLE OUTPUTS (solutions and instruments)

<table>
<thead>
<tr>
<th>Output name</th>
<th>Updated CIRCABC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>See section “new challenges “ for a complete lists of new features</td>
</tr>
<tr>
<td>Reference</td>
<td></td>
</tr>
<tr>
<td>Target release date / Status</td>
<td>2016</td>
</tr>
</tbody>
</table>

8.6.10 ORGANISATIONAL APPROACH

8.6.10.1 Expected stakeholders and their representatives

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISA² programme management</td>
<td>DIGIT.B6 (Margarida ABECASIS)</td>
</tr>
<tr>
<td>European Institutions, Member State Administrations and businesses</td>
<td>ISA² Committee, ISA² working/expert group</td>
</tr>
<tr>
<td>DIGIT A</td>
<td>Paulo Jose SANTOS (Acting Director), Henri PUTSEYS, Olivier HOCHE, Benoît ORIGAS</td>
</tr>
<tr>
<td>DIGIT C</td>
<td>Philippe VAN DAMME</td>
</tr>
</tbody>
</table>

8.6.10.2 Communication plan

<table>
<thead>
<tr>
<th>Event</th>
<th>Representatives</th>
<th>Frequency of meetings / absolute dates of meetings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Group Conference</td>
<td>Olivier HOCHE, Benoît ORIGAS, Margot FASSIAN</td>
<td>Once a year</td>
</tr>
<tr>
<td>ISA events</td>
<td>Olivier HOCHE, Benoît</td>
<td>Presentation to specific key</td>
</tr>
</tbody>
</table>
8.6.10.3 Governance approach

The approach and governance of the project is structured around 3 groups: the ISA² Coordination Group (or ISA CG equivalent), the Project Management Group and the Users Group.

- The ISA² Coordination Group assists the Commission in translating priorities into actions and ensures continuity and consistency in their implementation.

- 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.

8.6.11 TECHNICAL APPROACH

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

![Development Iteration Diagram]

**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.

### 8.6.12 COSTS AND MILESTONES

#### 8.6.12.1 Breakdown of anticipated costs and related milestones

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description of milestones reached or to be reached</th>
<th>Anticipated Allocations (KEUR)</th>
<th>Budget line ISA(^2) others (specify)</th>
<th>Start date (QX/YYYY)</th>
<th>End date (QX/YYYY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>Continuation of current CIRCABC Service</td>
<td>250</td>
<td>ISA(^2)</td>
<td>Q1/2016</td>
<td>Q4/2016</td>
</tr>
<tr>
<td>Inception</td>
<td>Service Pack</td>
<td>100</td>
<td>ISA(^2)</td>
<td>Q1/2016</td>
<td>Q4/2016</td>
</tr>
</tbody>
</table>
### Inception Execution

- **Performance Pack**: 50 ISA² Q1/2016 Q4/2016

### Execution

- **Communication & Trainings**: 50 ISA² Q1/2016 Q4/2016

### Operational

- **Continuation of current CIRCABC Service**: 250 ISA² Q1/2017 Q4/2017

### Inception Execution

- **Service Pack**: 100 ISA² Q1/2017 Q4/2017

### Inception Execution

- **Performance Pack**: 50 ISA² Q1/2017 Q4/2017

### Execution

- **Communication & Trainings**: 50 ISA² Q1/2017 Q4/2017

| Total | 900 |

*Legend: In grey are all the tasks that need to be adjusted year by year. It gives a general idea of the provisions but cannot be accurate.*

### 8.6.12.2 Breakdown of ISA² funding per budget year

<table>
<thead>
<tr>
<th>Budget Year</th>
<th>Phase</th>
<th>Anticipated allocations (in KEUR)</th>
<th>Executed budget (in KEUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Inception</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Operational</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>Execution</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Inception</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Operational</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>Execution</td>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

### 8.6.13 ANNEX AND REFERENCES

<table>
<thead>
<tr>
<th>Description</th>
<th>Reference link</th>
<th>Attached document</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 CIRCABC Service</td>
<td><a href="https://circabc.europa.eu/">https://circabc.europa.eu/</a></td>
<td></td>
</tr>
<tr>
<td>#2 CIRCABC OSS project on joinup.eu</td>
<td><a href="https://joinup.ec.europa.eu/software/circabc/home">https://joinup.ec.europa.eu/software/circabc/home</a></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>