European Commission

INTEROPERABILITY SOLUTIONS FOR
EUROPEAN PUBLIC ADMINISTRATIONS
MONITORING AND EVALUATION

D03.04 Perceived Utility Monitoring Report

ISA Action 2.5. CIRCABC

Framework Contract n° DI/07173-00

16 August 2016

DISCLAIMER

The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this document. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

© European Commission, 2016

EXECUTIVE SUMMARY

The purpose of this section is to provide an overview of the key findings of the Perceived Utility assessment of the service and the documentation of **the ISA Action 2.5 – CIRCABC.** The objective of the survey is to measure the action's Perceived Utility which is defined as the extent to which the outputs of an ISA action are meeting its direct beneficiaries' expectations[1].

The survey was designed in the EUSurvey tool and distributed by e-mail to 6185 contacts. Over the duration of more than two months[2], 260 stakeholders have responded.

Table 1 gives an overview of the main results of the survey. The detailed score calculation process is described in section 5.4.1.

	Score	Mode	StDev	StErr	Explanation of the score scale
Usefulness Score	5.60	7	1.34	0.07	Average value on a scale from 1 (Not useful at All) to 7 (Very Useful).
Value Score	3.86	4	1.10	0.03	Average value of all the statement means in the range from 1 (Disagree) to 5 (Agree).
User Satisfaction Score	76.03	Not applicable for this score			User Satisfaction Score from 0 (none of the respondents are satisfied) to 100 (all respondents are satisfied with the work performed by the Action).
Net Promoter Score	-15	Not applicable for this score			Net Promoter Score from -100 (every customer is a Detractor) to 100 (every customer is a Promoter).
OVERALL PERCEIVED UTILITY SCORE	3.67				**The Overall Perceived Utility Score is the average value of the Usefulness Score, the Value Score, the User Satisfaction Score, and the Net Promoter Score reduced to a five point scale in range from 1 – the lowest score to 5 – the highest score.**

TABLE 1 – ACTION 2.5 SURVEY MAIN RESULTS

Main findings:

• The survey results demonstrate that the service and the documentation of the **Action 2.5 – CIRCABC comply with the action's specific objectives, and partially comply with the ISA programme, however, there are numerous aspects requiring additional work**.

---

[1] DG BUDG (2004), "Evaluating EU activities, a practical guide for the Commission services"
[2] The survey was launched on the 04th of December 2015 and was active until the 31st January 2016.

- The service and the documentation of CIRCABC are perceived as more beneficial in terms of Collaboration than in terms of Sustainability or Potential Re-usability.

- 78% of the respondents think that the CIRCABC service and documentation are useful.

- The most valuable aspect about the CIRCABC service is the possibility of the document exchange.

- As admitted by the respondents, it is difficult to work with CIRCABC due to the lack of new or improved functions and user-friendly interface. As a result, they would not recommend the CIRCABC service and documentation.

REVISION HISTORY

Date	Version	Description	Authors	Approved by
11/03/2016	0.10	Initial version	CGI - Accenture	
16/03/2016	0.20	Updated version	CGI - Accenture	
09/05/2016	0.30	Updated version	CGI - Accenture	
21/06/2016	1.00	Final version	CGI - Accenture	
29/06/2016	2.00	Section 5.4.3 is updated	CGI - Accenture	.
16/08/2016	3.00			Approved by HVA on 29/07/2016

TABLE OF CONTENTS

TABLE OF FIGURES

TABLE OF TABLES

1 INTRODUCTION

CGI-Accenture has been requested to deliver Perceived Quality and Perceived Utility Monitoring and Evaluation Reports as part of the execution of the ISA programme monitoring (Technical Annex for Specific Contract SC 193 under Framework contract n° DI/07173-00).

Based on the scope of the Specific Contract, the Perceived Quality is to be measured for 15 actions and the Perceived Utility is to be measured for 17 actions. This report covers the Perceived Utility measurement of the service and the documentation of Action 2.5 – CIRCABC.

This document is divided into the following sections:

- **Section 1:** provides an overview of the structure of the report;
- **Section 2:** provides an overview of the action and its objectives;
- **Section 3:** explains the methodology used to measure the Perceived Utility;
- **Section 4:** summarises the collected data;
- **Section 5:** focuses on the survey results and the data analysis:
    - The demographic profile of respondents;
    - Usage frequency of the action's outputs;
    - Usefulness Score;
    - Perceived Utility measurements;
    - Action strengths, weaknesses, opportunities and threats;
    - Statements based on action objectives;
    - Respondent recommendations and opinions;
- **Section 6:** provides the survey conclusion and recommendations;
- **Section 7:** appendix includes:
    - Raw data export;
    - Recommendations and comments provided by the respondents;
    - Glossary.

2 OVERVIEW OF THE ACTION 2.5 - CIRCABC

CIRCABC, set up by the European Commission, enables geographically spread collaborative groups to share information and resources in private workspaces.

The application is already used by several European institutions, administrations and businesses. It is freely available for any organization or administration, public or private, and can also be deployed as an open source version. CIRCABC offers:

- Distributing multilingual and multi-format content, with version control;
- User interface available in 23 of the official EU languages;
- Fine-grained access to documents;
- High level of security: the system uses the https protocol to guarantee confidential data transfer and access is secured by European Commission's Authentication Service (ECAS);
- Sharing information between different workspaces;
- Translation management, multilingual search;
- Scheduling of events and meetings;
- Discussion forums (general or attached to a document);
- Accessibility for users with disabilities.

The private workspace in CIRCABC is called Interest Group (IG). It allows to manage content, users and communication features. Each group is managed by one or more IG leaders.

Some IGs are public (no authentication required). Others are accessible only for those authenticated via ECAS. A third type is reserved for users with membership to an IG.

IG offers the following services: Library, Members' Directory, Events, News Groups, Administrative Section and Information Service.

Action's Objective:

- CIRCABC is used in the implementation of many EU policies, both inside the EU Institutions and in Member States, providing them with a trustworthy and easy-to-use system for collaboration and information exchange. It can also be deployed as a standalone system in EU administrations or businesses.

Action's benefits:

- Readily available to institutions, eases the collaborative work on policies and projects throughout their lifecycles.
- Benefitting collaboration within an EU framework or for other purposes; allowing deployment of Open Source Software version in their services.

3 SURVEY METHODOLOGY

A common methodology was developed by the CGI-Accenture team for all the surveys included in the Perceived Quality and Perceived Utility Monitoring and Evaluation scope. The common methodology enables a comparison between the different action results. The first section explains how the Perceived Utility is measured and which dimensions are covered. The next section gives an overview of the main survey measurements. The last section describes the architecture of the survey.

3.1 PERCEIVED UTILITY

Perceived Utility is defined as the extent to which the effects (impact) of an ISA action correspond with the needs, problems and issues to be addressed by the ISA programme[3] and the actions' specific objectives.

Regarding the Perceived Utility measurement, several statements are derived from the objectives of the ISA programme. These statements are grouped in three dimension which is defined as the criteria for measuring the Perceived Utility:

- **Potential Re-usability:** the degree to which the action's outcome(s) can be reused by Public Administrations (PAs);

- **Sustainability:** to what extent is the financial, technical and operational sustainability of solutions ensured[4];

- **Collaboration:** the degree to which the action promotes/facilitates collaboration/cooperation between PA's[5].

The survey statements for the dimensions listed above were developed according to:

- The ISA programme's main objectives: "To support cooperation between European public administrations by facilitating the efficient and effective electronic cross-border and cross-sectorial interaction between such administrations, including bodies performing public functions on their behalf, enabling the delivery of electronic public services supporting the implementation of Community policies and activities[6] and actions' specific objectives." The Perceived Utility statements were tailored to reflect these objectives and were based on the ESOMAR[7] (World Association of Opinion and Marketing Research Professionals) standards.

---

[3] Papadomichelaki, X. and Mentzas, G. (2012), "e-GovQual: A multiple-item scale for assessing e-government service quality"
[4] European Commission (2013), Interim evaluation of the ISA programme, "Report from the Commission to the European Parliament and Council COM (2013) 5 final".
[5] CRN (2015), Collaboration http://research.crn.com/technology/knowledge_management/collaboration
[6] Decision No 922/2009/EC of the European Parliament and of the Council of 16 September 2009 on interoperability solutions for European public administrations (ISA) (2009)
[7] ESOMAR, edited by Hamersveld. M., Bont C. (2007), Market Research, Handbook, 5th Edition

The developed Perceived Utility dimension allows to perform a comparison between different actions and also will provide the opportunity to see if the ISA programme objectives have been met (from the user point of view).

3.2 SURVEY MEASUREMENTS

In the data analysis, the core types of measurements which are performed include the Usefulness Score, the Value Score, the User Satisfaction Score, the Net Promoter Score and the Overall Score for the Perceived Utility. The survey measurements are divided into two groups: action level measurement and Perceived Utility level measurements.

Action level measurement:

- The Usefulness Value Score indicates the respondents' evaluation of how useful the action is. The Usefulness Value Score is calculated taking into account a mean value from a single question: *"In overall how useful is/would be CIRCABC and its documentation in your work?"*

- Action strengths, weaknesses, opportunities and threats: Statements are located in quadrants, based on the dimensions' conformity and dimensions' importance calculated mean values. The quadrants highlight the weak and strong aspects of the action, as well as threats and opportunities.

- Statements based on action objectives show the respondents' evaluation to what extent the action's objectives have been achieved.

Perceived Utility level measurements:

- The Value Score shows the action's compliance to the dimensions defined above (see sections 3.1). Two aspects are considered for each dimension. On one side, the importance of the dimensions for the users is assessed. On the other side we measure if the action is compliant with the dimension. This section includes the analysis of specific statements, statement mapping to dimensions, dimensions' conformity results, criterion score aggregation and strengths and weaknesses of the action.

- The User Satisfaction Score shows how satisfied the respondents are with the action. The User Satisfaction Score is assessed with the reference to the results of the dimensions' importance and dimensions' conformity evaluation. The User Satisfaction Score is measured at the individual level for each of the survey respondents via the identification of the important dimensions for that particular respondent.

- The Net Promoter Score® (NPS) is a widely used management tool that helps evaluate the loyalty of a customer relationship. In order to evaluate the NPS, the question *"how likely the respondent would recommend the particular action's output to others"* is asked.

- The Overall Score is used to get a single score that describes the overall Utility of the action. In order to determine the Overall Score, the average value of the Usefulness score, the Value Score and the User Satisfaction Score is calculated. To calculate the Overall Score, all measurements are reduced to a five point scale.

3.3 SURVEY ARCHITECTURE

The survey is divided into several sections which are outlined below:

- The demographic profile: for the purpose of identifying the respondents' demographical profile, they are asked to answer several questions. The demographic profile illustrates the diversity of the respondents, thus ensuring that the opinion of different groups is included.

- Usage of the action outputs: for the purpose of identifying the usage rate of the action outputs, the respondents are asked to answer several questions regarding the usage of each action output. These questions also work as filters, selecting respondents who should evaluate the statements regarding the specific action output.

- The action's Usefulness: for the measurement of the action's usefulness, the respondents are asked to evaluate a single question using a 7-point Likert grading scale[8].

- The Perceived Utility measurement: in order to measure the Perceived Utility, the respondents are asked to rate dimensions and statements based on their level of importance and agreement using a 5-point Likert grading scale[8]. Responses to these questions are used to determine the Value Score, action strengths, weaknesses opportunities and threats and the User Satisfaction Score.

- The Net Promoter Score: there is a single question that measures the Net Promoter Score. By answering this question, the respondents indicate their likelihood of recommending the action's outputs to colleagues or other PAs.

- Action strengths, weaknesses, opportunities and threats shows the location of the action statements based on the dimensions' conformity and dimensions' importance results.

- Statements based on action objectives: in order to evaluate the extent to which these objectives conform to the action, the respondents are asked to grade statements based on their level of agreement using a 5-point Likert grading scale[8].

- The recommendations: the last section includes three open questions for recommendations and opinions regarding the action and the survey.

---

[8] A Likert Scale is a widely used scaling method developed by Rensis Likert. Likert scale refers to the use of an ordinal 4- or 5-point rating scale with each point anchored or labeled.

4 SURVEY DATA SUMMARY

This section aims to provide detailed information about the data gathering fieldwork. Table 2 gives an overview of the survey start and end dates, the number of respondents the survey was proposed to, the amount of responses collected, as well as the survey launching method. The data collection period was longer than the usual duration of one month due to the holiday period at the end of the year 2015. Despite the low response rate, a sample rate of 260 respondents is enough to perform the data analysis.

TABLE 2 – ACTION 2.5 SURVEY TECHNICAL INFORMATION ABOUT THE FIELDWORK

Start date:	04/12/2015
End date:	31/01/2016
The survey launch method:	E-mail notification
Reminders:	E-mail reminders sent out on 11/12/2015, 16/12/2015, 08/01/2016, 19/01/2016 and 26/01/2016
Target population:	6185
Number of reached respondents:	260
Number of suitable respondents for the survey:	260

5 SURVEY RESULTS AND ANALYSIS

This section aims to provide the detailed survey analysis and to present the results.

5.1 DEMOGRAPHIC PROFILE OF RESPONDENTS

The respondents' demographic profile tends to describe the action respondents from the demographical point of view. It illustrates the diversity of the respondents, thus ensuring that the opinion of different groups is included.

TABLE 3 – ACTION 2.5 DEMOGRAPHIC PROFILE OF RESPONDENTS

RESPONDENT PROFILE		Amount	Col %
ALL RESPONDENTS		260	100.0
RESPONDENT GROUP	Researcher	15	5.8
	Directing and Middle level manager	58	22.3
	Specialist	44	16.9
	Support staff	134	51.5
	Other (Mentioned 3 times: administrator; mentioned 1 time: EC staff; participant in DLM forum; policy manager; policy officer; technical secretary and UK government department)	9	3.5
ORGANISATION	Public Administration at national level	21	8.1
	Public Administration at local level	1	0.4
	Public Administration of non EU-countries	1	0.4
	EU institution	216	83.1
	Non-governmental or non-profit organisation	5	1.9
	Private sector	15	5.8
	Other (Mentioned 1 time: Joint undertaking of the EC)	1	0.4
LOCATION	Austria	4	1.5
	Belgium	138	53.1
	Czech Republic	2	0.8
	Denmark	4	1.5
	Estonia	1	0.4
	Finland	11	4.2
	France	3	1.2
	Germany	6	2.3
	Hungary	2	0.8
	Ireland	1	0.4
	Italy	11	4.2
	Luxembourg	48	18.5
	Netherlands	14	5.4
	Slovakia	1	0.4
	Spain	8	3.1
	Sweden	1	0.4
	United Kingdom	1	0.4
	Other (Mentioned 2 times: EC; 1 time: Australia; USA)	4	1.5

Base: all respondents, n=260

5.2 USAGE OF THE ACTION

The usage profile provides an overview of usage rate of the action. Table 4 illustrates the user profiles and the diversity of the CIRCABC action's output usage, thus ensuring that the opinion of different respondent groups is included.

TABLE 4 – ACTION 2.5 USAGE OF CIRCABC

USAGE PROFILE		Amount	Col %
ALL RESPONDENTS		260	100.0
CIRCABC PROFILE(S)*	Author	78	30.0
	Leader or Category Administrator	187	71.9
	Moderator	20	7.7
	Observer	47	18.1
	Other (mentioned 15 times: no answer/ don't know; 3 times: assessor; 1 time: IT administrator; consultant; read-only user; user)	22	8.5
INTENSITY WORKING WITH CIRCABC SERVICE/DOCUMENTS	Every day	24	9.2
	Several times a week	59	22.7
	Once a week	17	6.5
	Several times a month	69	26.5
	Once a month	53	20.4
	Only once	17	6.5
	Just heard, but don't use/work with CIRCABC	5	1.9
	Never heard about CIRCABC before	3	1.2
	Other (mentioned 7 times: Used in past, not using anymore; 3 times: twice a year; 2 times: no answer; 1 time: when needed)	13	5.0

Base: all respondents, n= 260
*There were multiple choices possible for this question. This explains why the percentage of responses can exceed 100%.

5.3 USEFULNESS SCORE

The Usefulness Score is calculated taking into account a single question: *"In overall how useful is/would be the CIRCABC service and documentation to your work?"*

The survey respondent is asked to provide his/her opinion using the 7-point Likert grading scale. For the evaluation of Usefulness, a grading scale is used with values ranging from "Very Useful" to "Not Useful at All". An additional "Hard to Say" option is provided, however this score is excluded from the score calculations. Before performing the survey data calculations, the 7-point Likert scale values are interpreted as numeric values:

- 7 – Very Useful;
- 6 – Useful;
- 5 – Rather Useful;
- 4 – Neither Useful nor Not Useful;
- 3 – Rather Not Useful;
- 2 – Not Useful;
- 1 – Not Useful at All;
- 0 – Hard to Say (*is not considered for the calculation).*

In order to have an overview of the positive ('Rather Useful', 'Useful' and 'Very Useful') and negative ('Rather Not Useful', 'Not Useful' and 'Not Useful at All') attitude proportions, the bars in blue represent the negative attitude, whereas the bars in pink and red represent the positive one. In addition, a neutral opinion (the bar in white) and a 'Hard to say' opinion (the bar in grey) are presented separately on the right. An explanatory legend with colour codes represents the data which is available. The average mean value is presented on the right side of the figure.

FIGURE 1 – ACTION 2.5 USEFULNESS SCORE

Base: All respondents, n=260
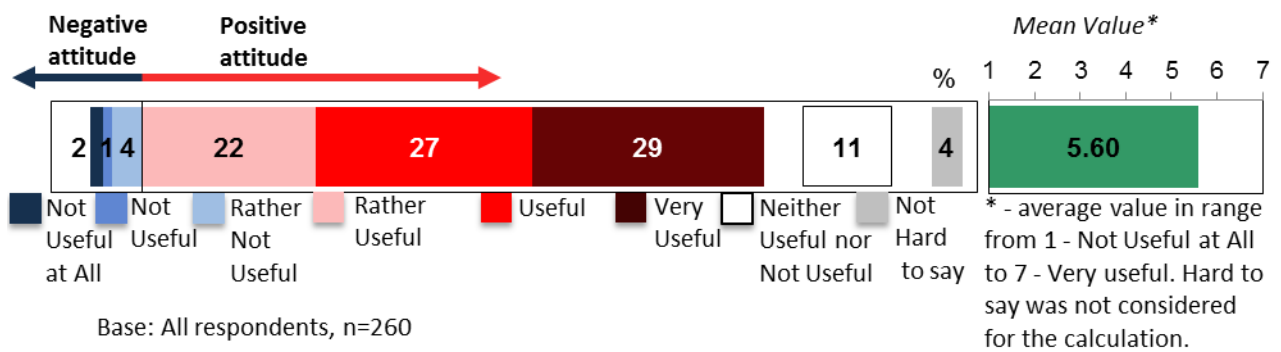
The survey results show that the service and the documentation of CIRCABC seem useful to the respondents in their work; only 7% of the respondents provided a negative response. The service and the documentation of CIRCABC appear to be very useful to nearly one third (78%) of the respondents. The mean value is **5.60,** which is between the values 5 - 'Rather Useful' and 6 - 'Useful'.

5.4 PERCEIVED UTILITY MEASUREMENTS

This section aims to provide a detailed Perceived Utility measurement analysis and to present the results.

5.4.1 Value Score

This section includes the analysis and results of Perceived Utility Score. It is structured into two main sections: the dimensions' importance and dimensions' conformity via statements.

5.4.1.1 DIMENSIONS IMPORTANCE

Prior to the evaluation of the dimensions' conformity to the outputs of the action, it is essential to initially ascertain whether these dimensions are important to the respondents while working with the action. If a specific dimension is important to the respondents, then it is essential that its conformity assessment is positive. However, if a dimension is not important to the respondents, it should not be considered as the action's weakness because of non-compliance with the outputs of the action.

Three Perceived Utility dimensions are included in the survey: Collaboration, Potential Re-usability and Sustainability. This section describes the respondents' answers regarding the importance of the dimensions.

Each respondent is requested to provide his/her opinion using the 5-point Likert grading scale. For the dimension importance evaluation, a grading scale with values ranging from 'Important' to 'Not important' is used. An additional 'Hard to Say/Not Applicable' option is provided, however this score is excluded from the score calculations. Before performing the survey data calculations, the 5-point Likert scale values are interpreted as numeric values:

- 5 – Important;
- 4 – Rather Important;
- 3 – Neither Important nor Unimportant;
- 2 – Rather not Important;
- 1 – Not Important;
- 0 – Hard to Say/Not Applicable *(is not considered for the calculation).*

In order to have an overview of the positive and negative attitude proportions, the bars in blue represent the negative attitude (answers 'Not Important' and 'Rather not Important'), whereas the bars in pink/red represent the positive one (answers 'Rather important' and 'Important'). In addition, a neutral opinion (the bars in white) and a 'Hard to say' opinion (the bars in grey) are presented separately on the right. An explanatory legend with colour codes represents the available data. The average mean value for each of the dimensions is presented on the right side of the figure.

FIGURE 2 – ACTION 2.5 PERCEIVED UTILITY DIMENSIONS IMPORTANCE RESULTS

"How important to you are/would be these factors when using CIRCABC taking into consideration CIRCABC as a whole with all its outputs – service and documentation?"

Base: All respondents, n=260
*Each respondent evaluated two aspects of Potential Re-Usability
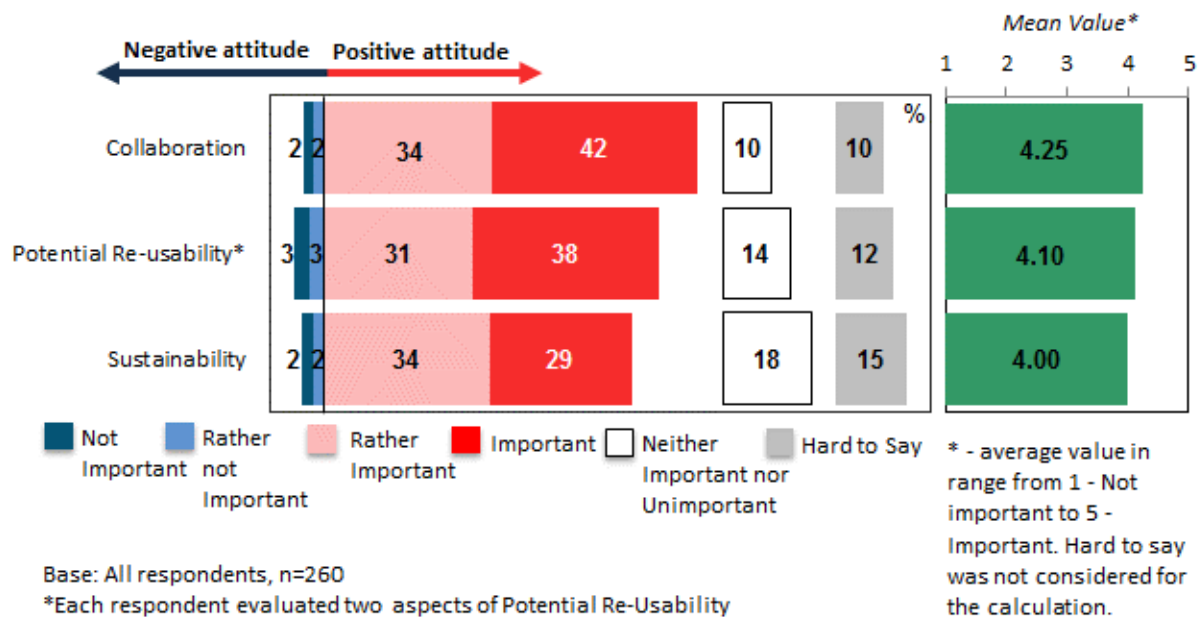
The survey results indicate that the most important Perceived Utility dimension of the service and the documentation of CIRCABC is Collaboration. Only 4% of the respondents evaluated this dimension as 'Not Important' or 'Rather not Important', whereas more than 40% of the respondents evaluated it as 'Important'. The mean value is **4.25**. The second most important dimension is Potential Re-usability (mean value **4.10**) and

the least important (but not unimportant) is Sustainability. The mean value of the Sustainability importance is **4.00**, which is higher than the average value/neutral value (3 - 'Neither Important nor Unimportant').

5.4.1.2 DIMENSIONS CONFORMITY

In order to measure the Perceived Utility dimensions' conformity to the action, a set of descriptive statements was developed for each dimension. By evaluating the statement conformity to the action, the extent to which the dimensions correspond to the ISA programme's objectives is measured.

This section provides an analysis of the statements. It starts with statement mapping to dimensions, which is followed by the analysis of the Perceived Utility dimensions' conformity statements. Finally, the last section provides an overview of the statement conformity scores, which are summarised in groups according to the dimensions.

5.4.1.2.1 PERCEIVED UTILITY STATEMENT MAPPING TO DIMENSIONS

In total, Action 2.5 has nine Perceived Utility statements regarding the dimensions' conformity. Table 5 gives an overview of the statements representing each dimension. The Sustainability dimensions is represented by four statements, the Collaboration dimension by three statements, while the Potential Re-usability dimensions is represented by two statements.

TABLE 5 – ACTION 2.5 STATEMENT MAPPING TO UTILITY DIMENSIONS

	Statement	Dimension
1	Overall, CIRCABC activities help save costs	Potential Re-usability
2	Overall, CIRCABC activities help save time	Potential Re-usability
3	It is planned to start/continue using CIRCABC documentation for your business purposes	Sustainability
4	It is planned to start/continue using CIRCABC service for your business purposes	Sustainability
5	CIRCABC service provides sustainable solutions that will also be relevant in future	Sustainability
6	Overall, CIRCABC service supports effective reuse of your services	Sustainability
7	CIRCABC service helps successfully cooperate with other public administrations/departments	Collaboration
8	Overall, CIRCABC service supports effective electronic cross-border and cross sector interaction	Collaboration
9	CIRCABC service supports the implementation of European community policies and activities	Collaboration

5.4.1.2.2 DIMENSIONS CONFORMITY RESULTS

For the purpose of describing dimensions' conformity to the action, seventeen Perceived Quality and eight Perceived Utility statements are designed for this survey. The respondents are asked to evaluate the extent to which these statements conform to this particular action.

Each respondent is requested to provide his/her opinion using the 5-point Likert grading scale. For the dimensions' conformity evaluation, a grading scale with values ranging from 'Agree' to 'Disagree' is applied. An additional 'Hard to Say/Not Applicable' option is provided, however this score is excluded from the score calculations. Before performing the survey data calculations, the 5-point Likert scale values are interpreted as numeric values:

- 5 – Agree;
- 4 – Rather Agree;
- 3 – Neither Agree nor Disagree;
- 2 – Rather Disagree;
- 1 – Disagree;
- 0 – Hard to Say/Not Applicable *(is not considered for the calculation).*

In order to have an overview of the positive and negative attitude proportions, the bars in blue represent the negative attitude (answers 'Disagree' and 'Rather Disagree'), whereas the bars in pink/red represent the positive one (answers 'Agree' and 'Rather Agree'). In addition, a neutral opinion (the bars in white) and the answer 'Hard to say' (the bars in grey) are presented separately on the right. An explanatory legend with colour codes represents the available data. The average mean value for each of the dimensions is presented on the right side of the figure.

FIGURE 3 – ACTION 2.5 PERCEIVED UTILITY DIMENSIONS CONFORMITY RESULTS

Base: All respondents, n=260
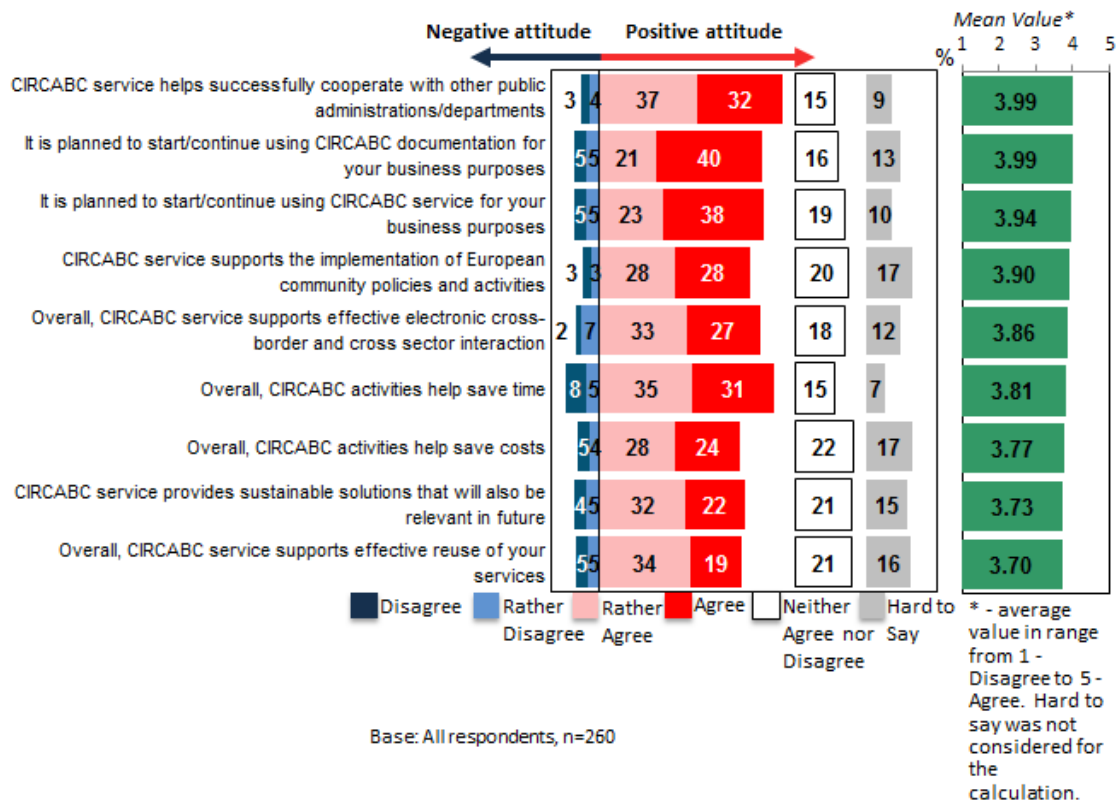
Figure 3 proves that all of the statements are evaluated as reasonably conformable to the service and the documentation of CIRCABC. The average value is higher than the neutral value (3 - 'Neither Agree nor Disagree'). The most conformable statements regarding the evaluation of the CIRCABC service and documentation are:

- 'CIRCABC services helps successfully cooperate with other public administrations/departments' (mean value **3.99**) and

- 'It is planned to start/continue using CIRCABC documentation for your business purposes' (mean value **3.99**).

Table 6 provides an overview of the statement conformity scores, which are summarised per dimension. To calculate these scores, the average values of all the relevant dimension statements are taken into account.

Table 6 also provides an overview of the additional statistical calculations[9] - mode, standard deviation and standard error. With reference to the theory used in business research methods[10], it is concluded that for

---

[9] Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 226).
[10] Cooper D. R., Schindler P. S. (2013), Business Research Methods, 12th Edition

statistically meaningful calculations, the minimum respondent number is equal to or greater than ten per statement.

TABLE 6 – ACTION 2.5 ADDITIONAL STATISTICAL CALCULATIONS FOR UTILITY DIMENSIONS

	Dimension	MEAN	MODE	StDev	StErr
Per dimension	Potential Re-usability	3.80	4	1.15	0.06
	Sustainability	3.85	5	1.13	0.04
	Collaboration	3.93	4	1.03	0.04
Total Criterion Score		3.86	4	1.10	0.05

The survey results show that the respondents evaluated the Collaboration statements as the most conformable to the service and the documentation of CIRCABC (mean value **3.93**). The Sustainability has the next highest evaluation (mean value **3.85**). The respondents evaluated the Potential Re-usability statements (mean value **3.80**) as the least conformable (but not as unconformable, since the value is higher than a neutral value 3 - 'Neither agree nor disagree'). However, the Sustainability and the Potential Re-usability dimensions' conformity scores are in the range of the Standard Error, thus these two dimensions have very similar conformance.

5.4.1.2.3 PERCEIVED UTILITY CRITERION SCORE AGGREGATION

Figure 4 provides a visual overview of the dimension conformity scores.

FIGURE 4 – ACTION 2.5 PERCEIVED UTILITY CRITERION SCORE AGGREGATION
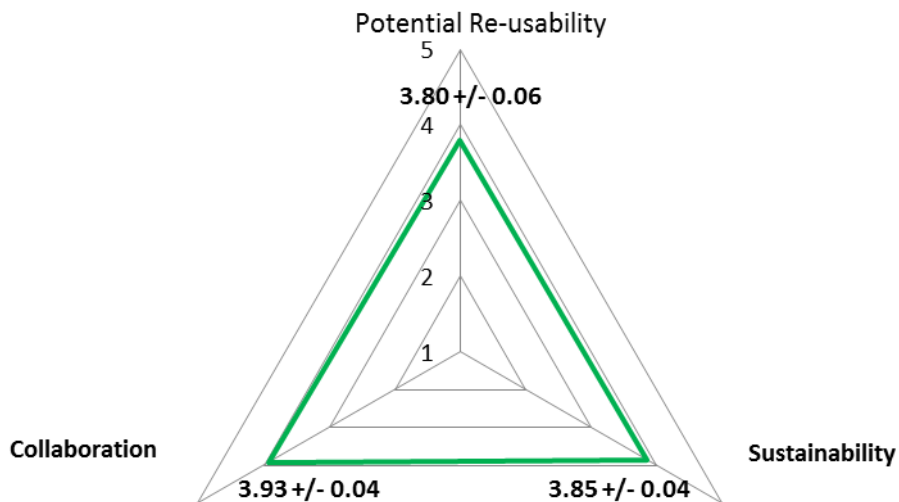
5.4.2 User Satisfaction Score

The User Satisfaction Score shows how satisfied and happy the respondents are with the performance of a specific action. The User Satisfaction Score is expressed as a percentage from 0 to 100, where 0 signifies that

there are no satisfied and happy respondents, whereas 100 signifies that all respondents are satisfied and happy with the work performed by the action.

The User Satisfaction Score is assessed with reference to the results of the dimensions' importance and dimensions' conformity evaluation. The User Satisfaction Score is measured at the individual level for each of the survey respondents via identification of the important dimensions for that particular respondent.

To increase the accuracy of the calculation, a specific weight coefficient is applied to the dimensions. To those dimensions which were evaluated as "Important" a weight coefficient of 1 was applied, while a coefficient of 0.5 was applied to the dimensions which were evaluated as "Rather Important". A coefficient of 0 is applied to all the other dimensions. Finally, all the individual values are summed.

As the next step, an analysis of the statements which represent these identified dimensions is performed. If a respondent claimed that a particular statement fully corresponded to the specific dimension (value 5 – 'Agree'), then a coefficient of 100 (100% eligibility) is assigned. If evaluated with 4 – 'Rather Agree', a coefficient of 75 applies, if evaluated with 3 – 'Neither Agree nor Disagree', a coefficient of 50 applies, if evaluated with 2 – 'Rather Disagree', a coefficient of 25 applies, and in the case it was evaluated with 1 – 'Disagree', the coefficient is 0.

FIGURE 5 – ACTION 2.5 PERCEIVED UTILITY USER SATISFACTION SCORE

Figure 5 shows that the User Satisfaction Score is **76.03**. The result indicates a high level of respondent satisfaction with the service and the documentation of CIRCABC.

Base: All respondents, n=260
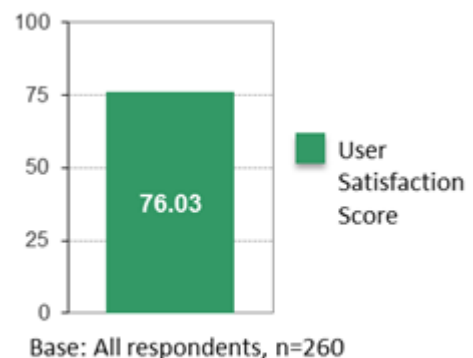
5.4.3 Net Promoter Score

The Net Promoter Score® (NPS) is a widely used management tool that helps evaluate the loyalty of a customer relationship[11]. This management tool has been adapted to suit the ISA programmes' Evaluation and Monitoring activities and measures the overall respondents'/stakeholders' experience and loyalty to a specific ISA action.

---

[11] Official webpage of Net Promoter Score ® community http://www.netpromoter.com/home.

In order to evaluate the NPS, the question "how likely the respondent would recommend the particular action's output to others" is asked. The assessment is done on a scale from 0 to 10, where 0 represents the answer "Not likely at all" and 10 – "Extremely likely"[12]. After the data analysis, the respondents are classified as follows:

- **Promoters** (numeric values from 9 - 10) - loyal users who will keep using the action's final outcome and refer others, promoting the usage of the action's outcomes;
- **Passives** (numeric values from 7 - 8) - satisfied but unenthusiastic users who will most probably not recommend the action's outcomes to others;
- **Detractors** (numeric values from 0 - 6) - unhappy users who can damage the image and decrease the usage of the action's outcomes.

The NPS final score calculation is done based on the following formula:

<div style="border:1px solid black; padding:8px; text-align:center;">

NPS = % of Promoters - % of Detractors[12]

</div>

The result can range from a low of -100 (every customer is a Detractor) to a high of +100 (every customer is a Promoter).

FIGURE 6 – ACTION 2.5 CLASSIFICATION OF RESPONDENTS ACORDING TO THE NET PROMOTER SCORE

Base: All respondents, n=260
One respondent = 0.38%

---
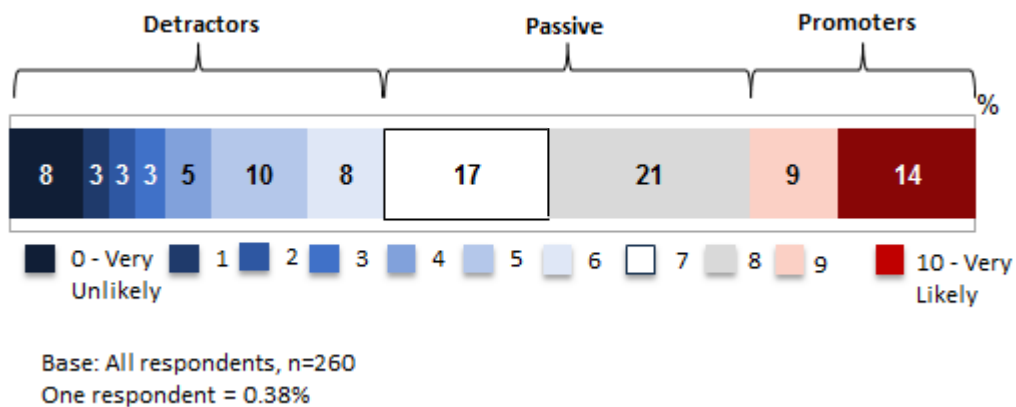
[12] Markey, R. and Reichheld, F. (2011), "The Ultimate Question 2.0: How Net Promoter Companies Thrive in a Customer-Driven World"

FIGURE 7 - ACTION 2.5 PERCEIVED UTILITY NET PROMOTER SCORE

Base: Qualified respondents,=n=260
NPS = % of Promoters - % of Detractors
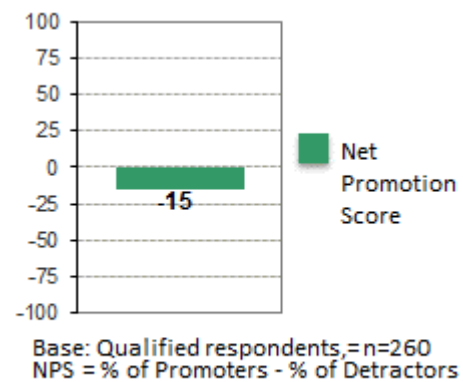
Figure 7 shows that slightly less than one quarter of the respondents (23%) are Promoters of the service and the documentation of CIRCABC. It is very likely that this respondent group would recommend the service and the documentation of CIRCABC to colleagues or other PAs, whereas 39% of the respondents would not recommend CIRCABC to colleagues or other public administration. According to the NPS terminology, such respondents can be identified as Detractors. The Net Promoter Score value is calculated as the difference between the Promoters and Detractors. In the CIRCABC case, the NPS is -15 (NPS is expressed in whole numbers). This indicator can be assessed as an undesirable tendency because of a negative value (below the neutral value of 0 points).

5.4.4 Overall Utility Score

Referring to the performed measurements described earlier, namely the Usefulness Score, the Value Score, the User Satisfaction Score and the NPS, an Overall Perceived Utility Score is calculated.

To calculate the Overall Perceived Utility Score, all measurements are reduced to a five point scale (the statements used to calculate the Value Score are already expressed using a scale from 1 to 5, the Usefulness Score had values from 1 to 7, NPS - from -100 to +100, and the User Satisfaction Score - from 0 to 100). In order to determine the Overall Perceived Utility score, the average value of these four measurements is calculated. To reduce any linear scale to a different linear scale the following formula[13] is used:

$$Y = (B - A) * (x - a) / (b - a) + A$$

- Y = Value after reducing to a five point scale
- x = Value in the initial scale
- B = The highest value of the new scale (in this case it is 5, as we are reducing other scales to a five point scale)

---

[13] *Transforming different Likert scales to a common scale*. IBM. Retrieved February 04. 2016., from http://www-01.ibm.com/support/docview.wss?uid=swg21482329

- A = The lowest value of the new scale (in this case it is 1, as we are reducing other scales to a five point scale)
- b = The highest value of the original scale (for Net Promoter Score and User Satisfaction Score it is + 100, for Usefulness Score it is 7)
- a = The lowest value of the original scale (for the Net Promoter Score it is 100, for the User Satisfaction Score it is 0 and for the Usefulness Score it is 1)

Example of reducing Net Promoter Score to a five point scale:

(5-1) * ((-15) - (-100)) / (100 - (-100)) + 1 = 4 * 85 / 200 +1 = 340 / 200 + 1 = 1.70 + 1 = 2.70

TABLE 7 – ACTION 2.5 OVERALL PERCEIVED UTILITY SCORE CALCULATION

NAME OF THE SCORE	ORIGINAL VALUE	VALUE AFTER REDUCING TO A FIVE POINT SCALE
Usefulness Score	5.60	4.07
Value Score	3.86	3.86
User Satisfaction Score	76.03	4.04
Net Promoter Score	-15	2.70
OVERALL PERCEIVED UTILITY SCORE		**3.67**

As the survey results indicate that on a five point scale the Usefulness Score (**4.07**) and the Value score (**4.04**) have the highest values. The Net Promoter Score has the lowest value (**2.70**) and it is below the average, indicating that a higher proportion of respondents would not recommend the service and the documentation of CIRCABC to colleagues or other PAs. The high difference between the NPS and the Usefulness Score shows that there are some issues with the action, despite its Usefulness. These issues are analysed in the section 5.7.

5.5 ACTION STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

When analysing the data results of the dimensions' conformity versus the dimensions' importance, the action's strengths, weaknesses, opportunities and threats can be identified.

Statements are located in quadrants, based on the dimensions' conformity statements and dimensions' importance calculated mean values. The quadrants highlight the weak and strong aspects of the action, as well as threats and opportunities.

In general, all the statements that are attributed to the action can be grouped into four categories:

- Strengths – Essential to respondents and relevant to the action (1st quadrant);

- Weaknesses – Essential to respondents but not relevant to the action (2nd quadrant);

- Threats – Not essential to respondents and not relevant to the action (3rd quadrant);

- Opportunities – Not essential to respondents but relevant to the action (4th quadrant).

The following colours are used to identify Perceived Utility dimensions in Figure 8:

- Dark blue: Potential Re-usability;

- Red: Sustainability;

- Brown: Collaboration.

As seen in Figure 8, all nine statements are evaluated as essential to the respondents and conformable to the service and the documentation of CIRCABC - all of them are placed in the 1st quadrant and are identified as strengths.

When comparing different statements, it is evident that the following two statements are the action's most important strengths (the most relevant to the action and important to the respondents):

- *'CIRCABC service helps successfully cooperate with other public administrations/departments'* (statement 7) and

- *'It is planned to start/continue using CIRCABC documentation for your business purposes' (statement 3).*

The following statements are less relevant (but not irrelevant, since the average score is higher than 3 - point mark):

- *'Overall, CIRCABC service supports effective reuse of your services'* (statement 6) and

- *'CIRCABC service provides sustainable solutions that will also be relevant in future'* (statement 5).

FIGURE 8 – ACTION 2.5 PERCEIVED UTILITY ACTION STRENGTHS, WEAKNESSES, THREATS AND OPPORTUNITIES
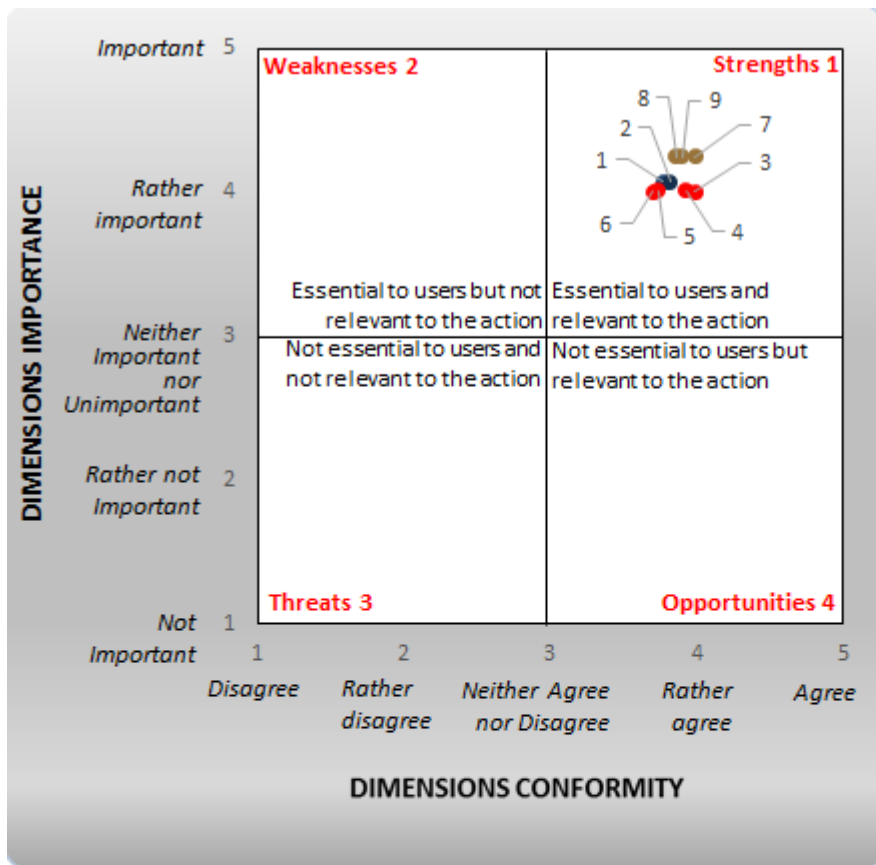
I. Potential Re-usability:

1 - Overall, CIRCABC activities help save costs

2 - Overall, CIRCABC activities help save time

II. Sustainability:

3 - It is planned to start/continue using CIRCABC documentation for your business purposes.

4 - It is planned to start/continue using CIRCABC service for your business purposes.

5 - CIRCABC service provides sustainable solutions that will also be relevant in future

6 - Overall, CIRCABC service supports effective reuse of your services

III. Collaboration:

7 - CIRCABC service helps successfully cooperate with other public administrations/departments

8 - Overall, CIRCABC service supports effective electronic cross-border and cross-sector interaction

9 - CIRCABC service supports the implementation of European community policies and activities

5.6 STATEMENTS BASED ON ACTION OBJECTIVES

For the purpose of describing the action's objectives, statements based on action objectives were designed for this survey. The respondents were asked to evaluate the extent to which these statements conform to the particular action, namely, if the action's objectives have been achieved.

The respondent is asked to provide his/her opinion using the 5-point Likert grading scale. For the dimensions' conformity evaluation, a grading scale with values ranging from 'Agree' to 'Disagree' is applied. An additional 'Hard to Say/Not Applicable' option is provided, however this score is excluded from the score calculations. Before performing the survey data calculations, the 5-point Likert scale values are interpreted as numeric values:

- 5 – Agree;
- 4 – Rather Agree;
- 3 – Neither Agree nor Disagree;
- 2 – Rather Disagree;
- 1 – Disagree;
- 0 – Hard to Say/Not Applicable *(is not considered for the calculation).*

In order to have an overview of the positive and negative attitude proportions, the bars in blue represent the negative attitude (answers 'Disagree' and 'Rather Disagree'), whereas the bars in pink/red represent the positive ones (answers 'Agree' and 'Rather Agree'). In addition, a neutral opinion (the bars in white) and a 'Hard to say' opinion (the bars in grey) are presented separately on the right. An explanatory legend with colour codes represents the available data. The average mean value for each of the dimensions is presented on the right side of the figure.

FIGURE 9 – ACTION 2.5 STATEMENTS BASED ON ACTION OBJECTIVES
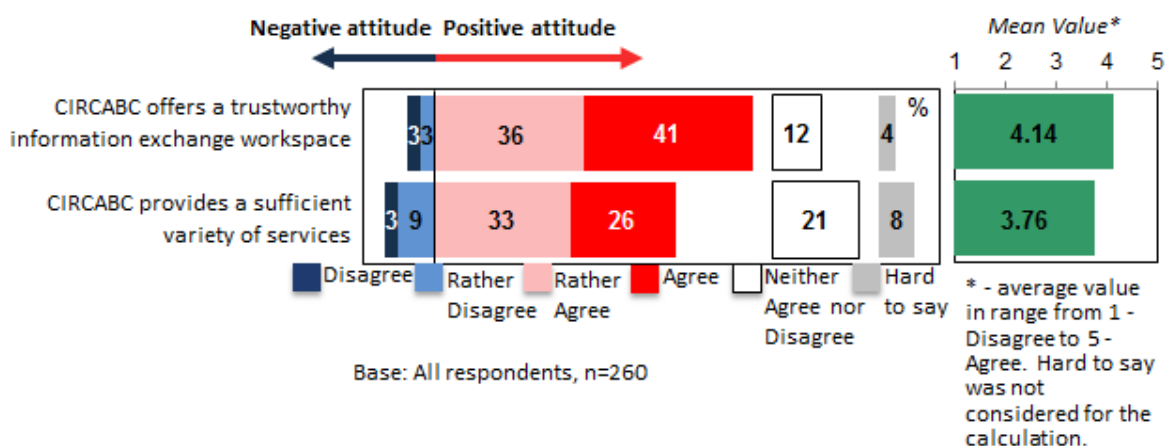
The survey results demonstrate that statements based on action objectives have been evaluated rather conformable to the action. Both statements have a higher mean value than the neutral value (3 - 'Neither

Agree nor Disagree'). Majority of the respondents (77%) had a positive attitude towards CIRCABC as being a trustworthy information exchange workspace. The statement was evaluated with a mean value – **4.14**. The second statement regarding the variety of the services provided by the CIRCABC was evaluated with a mean value – **3.76**. More than half of the respondents (59%) agreed with this statement.

5.7 RESPONDENT RECOMMENDATIONS AND OPINIONS

This section provides an overview of the recommendations and opinions received from the respondents.

In total, 94 respondents have provided their recommendations on how to improve the service and the documentation of CIRCABC. Figure 10 shows the main results.

FIGURE 10 – ACTION 2.5 RECOMENDATIONS ON CIRCABC
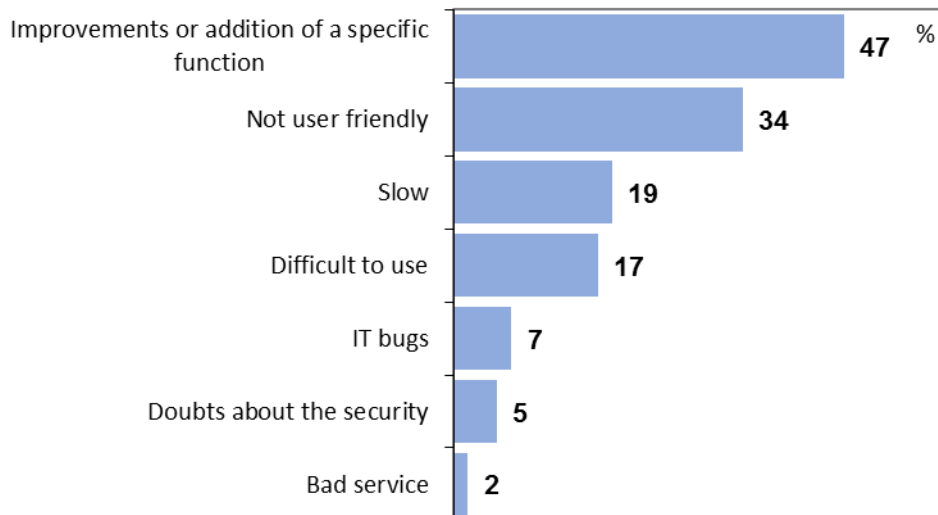
Base: Respondents who named benefits of CIRCABC, n=94
Respondents could name more than one recommendation. This explains why the percentage of responses can exceed 100%.

47% of the respondents have provided specific recommendations on how to improve the already existing CIRCABC functions and recommendations about new functions which could help them in their work, for example (a full list of recommendations are in section 7.2):

- "Would like to get failure notification in case a recipient does not get our message";
- "The possibility to know the activity on a specific IG";
- "Enable google style general search for documents".

34% of the respondents consider that the service and the documentation of CIRCABC is not user-friendly and require improvements. 19% expressed their opinions on the CIRCABC service being slow; almost the same proportion of respondents (17%) said that they have difficulties working with the service and the documentation of CIRCABC.

In Figure 11 the benefits and the most valuable things about the documentation and the service of CIRCABC identified by the respondents are presented.

FIGURE 11 – ACTION 2.5 BENEFITS OF CIRCABC
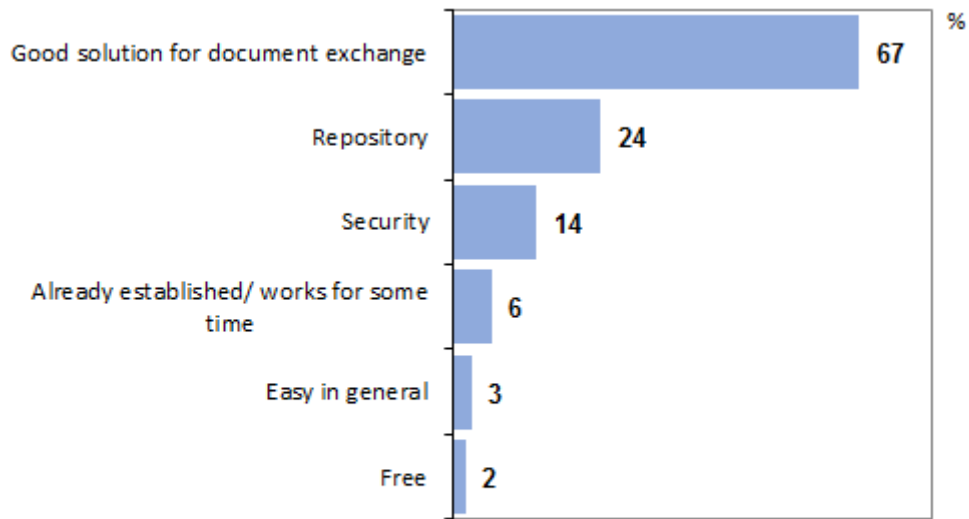
Base: Respondents who named benefits of CIRCABC, n=94
Respondents could name more than one recommendation. This explains why the percentage of responses can exceed 100%.

67% of respondents think that the most valuable aspect of CIRCABC service is the possibility of the document exchange. Almost one fourth of the respondents (24%) considers the usage of the CIRCABC service as a document repository as the main benefit of the action. In addition, 14% emphasized that CIRCABC provides a secure place for the document storage or exchange.

The full list of recommendations, named benefits, and the most valuable things are available in the section 7.2.

6 SURVEY CONCLUSION AND RECOMMENDATIONS

The objective of this survey was to evaluate the Perceived Utility of the service and the documentation of Action 2.5 – CIRCABC. The following conclusions have been drawn based on the analysis performed:

- The ISA Action 2.5 - CIRCABC received a rather **positive Perceived Utility assessment with an Overall Perceived Utility Score of - 3.67 out of 5.** The respondents consider CIRCABC as useful, however, there are aspects that require additional work.

- The results show that service and the documentation of CIRCABC is perceived as more beneficial in terms of Collaboration than in terms of Sustainability or Potential Re-usability.

- Two-thirds of the respondents (67%) consider that the most valuable aspect about the CIRCABC service is the possibility of the document exchange.

- 78% of the respondents think that service and the documentation of CIRCABC is useful.

- However, a high proportion of the respondents admitted that, it is difficult to work with CIRCABC due to the lack of new or improved functions and user-friendly interface. As a result, they would not recommend the CIRCABC service and documentation.

Based on the conclusions drawn, CGI-Accenture advices the following recommendations:

- Improvements in quality of the service and the documentation of CIRCABC with a special attention to making it faster and more user friendly are recommendable.

- According to the respondents: the implementation of new functions and improvements to already existing ones would serve as a great benefit to the action and would probably improve the respondent's willingness to recommend the service and the documentation of CIRCABC to colleagues or other PAs.

- IT bugs should be fixed.

7 APPENDIX

7.1 RAW DATA EXPORT

The attached file contains the survey result export.

Raw Data.xls

7.2 RECOMMENDATIONS AND COMMENTS

The attached file contains respondent recommendation and comment export.

Recommendations
and comments.xls

7.3 GLOSSARY

- A Likert Scale is a widely used scaling method developed by Rensis Likert. Likert scale refers to the use of an ordinal 4- or 5- point rating scale with each point anchored or labelled.

- The mean[9] (average) is the most popular measure of location or central tendency; has the desirable mathematical property of minimizing the variance. To get the mean, you add up the values for each case and divide that sum by the total number of cases;

- Mode[9] refers to the most frequent, repeated or common value in the quantitative or qualitative data. In some cases it is possible that there are several modes or none;

- The Net Promoter Score® (NPS) is a widely used management tool that helps evaluate the loyalty of a customer relationship. Customers are classified as Promoters, Passive and Detractors.

- 'Perceived Quality' is defined as the extent to which the outputs of an ISA action are meeting its direct beneficiaries' expectations;

- Standard deviation[9] shows the spread, variability or dispersion of scores in a distribution of scores. It is a measure of the average amount the scores in a distribution deviate from the mean. The more widely the scores are spread out, the larger the standard deviation;

- Standard error[9] is the standard deviation of the sampling distribution of a statistic. It is a measure of sampling error; it refers to error in estimates due to random fluctuations in samples. It goes down as the number of cases goes up. The smaller the standard error, the better the sample statistic is as an estimate of the population parameter – at least under most conditions;

- 'Perceived Utility' is defined as the extent to which the effects (impact) of an ISA action correspond with the needs, problems and issues to be addressed by the ISA programme;

INTEROPERABILITY SOLUTIONS FOR EUROPEAN PUBLIC ADMINISTRATIONS MONITORING AND EVALUATION

D03.06 ACTION 2.5 PERCEIVED QUALITY MONITORING REPORT

Framework Contract n° DI/07173

31st July 2015

DISCLAIMER

The information and views set out in this publication are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this document. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.

EXECUTIVE SUMMARY

The purpose of this section is to provide an overview of the key findings of the Perceived Quality monitoring and evaluation activities.

The survey for measuring the Perceived Quality of Action 2.5 – Communication and Information Resource Centre for Administrations, Businesses and Citizens (CIRCABC), was launched during the first semester of 2015. The objective of the survey was to evaluate the Perceived Quality of the CIRCABC application. More specifically, the goal of the survey was to understand to what extent the application is user-friendly and to recognise aspects that might require improvement.

The survey was designed in the EUSurvey tool and distributed by e-mail and a pop-up message on the CIRCABC application.

The survey was launched on the 20th of April 2015 and was active for one month, until the 20th of May 2015. In total, 864 CIRCABC users responded to the survey.

The survey result analysis (see The respondents' demographic profile tends to describe the action respondents from the demographical point of view. It illustrates the diversity of the respondents, thus ensuring that the opinion of different groups is included.

TABLE 3 – ACTION 2.5 DEMOGRAPHIC PROFILE OF RESPONDENTS

) shows the Action 2.5 Perceived Quality scores. The **Perceived Quality score** is **3.22** (scale: 1…5).

The detailed score calculation process is described in Section 4.1.4.

TABLE 8 – ACTION 2.5 SURVEY RESULTS

Evaluation criteria	Mean[14]	Mode[14]	StDev[14]	StErr[14]
Action 2.5 Perceived Quality	3.22	4	1.12	0.01

Conclusion: In general, the overall Perceived Quality score and respondents' commentary indicate that there are various aspects of the application that require improvement. The respondents indicated there is a need for a communication and information resource centre, however CIRCABC does not have the best technical solution and the application should be redesigned. The CIRCABC's Security/Privacy aspect was valued the highest, while the lowest ratings were for the application's Efficiency and Support dimensions. In particular, there is a need for drawing a special attention to the application's user interface and core feature functionalities, as well as the quality of the Support Service.

---

[14] see Glossary (Section 7.3)

REVISION HISTORY

Date	Version	Description	Authors	Approved by
09-June-2015	0.10	Initial version	CGI-Accenture	
31-July-2015	1.00	For QA purpose, the accepted draft version is changed into the final version. No other changes are implemented.	CGI-Accenture	

TABLE OF CONTENTS

TABLE OF FIGURES

TABLE OF TABLES

1. INTRODUCTION

CGI-Accenture has been requested to deliver a Perceived Quality Monitoring and Evaluation Report as part of the execution of the ISA programme monitoring (Technical Annex for Specific Contract N° 52 under Framework contract N°DI/07173).

Based on the scope of the Specific Contract, the Perceived Quality is to be measured for 9 actions and the Utility is to be measured for 13 actions. This report covers the Perceived Quality measurement for Action 2.5 – Communication and Information Resource Centre for Administrations, Businesses and Citizens (CIRCABC).

This document is divided into the following sections:

- **Section 1** provides an overview of the structure of the report;
- **Section 3** provides an overview of the methodology used for the Perceived Quality measurement;
- **Section 3** summarises the collected data;
- **Section 4** focuses on the survey result overview and data analysis;
- **Section 5** provides the survey conclusions and recommendations;
- **Section 6** appendix includes:
    - o Statement mapping to dimensions;
    - o Status of the respondents agreed to be contacted;
    - o Raw data export;
    - o Respondent comments and recommendations;
    - o Glossary.

2. SURVEY METHODOLOGY

A common methodology was developed by the previous ISA Monitoring and Evaluation contractor for all the surveys that enables comparison between the different survey results. This methodology was also applied to evaluate the Action 2.5. This section explains how the Perceived Quality is measured and what dimensions are covered. The last part of this section describes the architecture of the survey.

2.1. PERCEIVED QUALITY

'Perceived Quality' is defined as the **extent to which the outputs of an ISA action are meeting its direct beneficiaries' expectations.**[15]

Perceived Quality is measured using the eGovQual scale model[16].

The assessment is based on the following dimensions:

- **Efficiency:** measures the degree to which the application is easy to use;
- **Trust (Privacy):** measures the degree to which the user believes the application is safe from intrusion and protects personal information;
- **Reliability:** measures the feasibility and speed of accessing, using, and receiving services of the application;
- **Support:** measures the ability to get assistance when needed.

2.2. SURVEY ARCHITECTURE

In order to measure the Perceived Quality a respondent is supposed to grade the statements based on his/her level of agreement. A 5-point Likert scale[17] is used as a grading scale, ranging from 'Strongly Agree' to 'Strongly Disagree' with an additional 'No Opinion/Not Applicable' option.

For each presented statement the user is able to provide his/her opinion and suggestions for improvement in a free text field in case he/she rated the statement with 'Disagree' or 'Strongly Disagree'.

As the responses collected are depending on the users' profiles, the user is requested to answer skip logic questions with either 'Yes' or 'No' and afterwards more questions are presented if the respondent selected 'Yes'.

---

[15] DG BUDG (2004), "Evaluating EU activities, a practical guide for the Commission services"
[16] eGovQual scale developed by Papadomichelaki and Mentzas (2012)
[17] A Likert Scale is a widely used scaling method developed by Rensis Likert. Likert scale refers to the use of an ordinal 4- or 5-point rating scale with each point anchored or labeled.

3. ACTION 2.5 SURVEY DATA SUMMARY

Table 9 gives an overview on the survey start date, end date, the amount of responses collected, as well as the survey launching methods.

TABLE 9 – ACTION 2.5 SURVEY DATA SUMMARY

Action 2.5 – CIRCABC	
Start date:	20/04/2015
End date:	20/05/2015
Amount of responses:	864
The survey launching methods:	Pop-up message on CIRCABC and E-mail notification

4. ACTION 2.5 SURVEY RESULTS AND ANALYSIS

This section aims to provide a detailed overview and survey result analysis on the survey response range at the following levels:

- **Overall Survey Response Overview** shows a complete survey response range collection covered by the Action 2.5 Perceived Quality survey;

- **Result Analysis According to the Evaluation Criteria** provides a score calculation by evaluation criteria dimensions and the overall evaluation criteria score.

4.1. ACTION 2.5 SURVEY RESULT OVERVIEW

4.1.1. Distribution of Respondents

Figure 12 shows the distribution of the Action 2.5 Perceived Quality survey respondents according to the type of organisations they belong to. The majority of the survey respondents are from EU Institutions (60.1%) and EU Public administrations at national level (21.2%). The smallest portion of respondents are from Non-governmental organisations, Academic and EU Public administrations at local level.

FIGURE 12 – RESPONDENTS' ORGANISATIONS
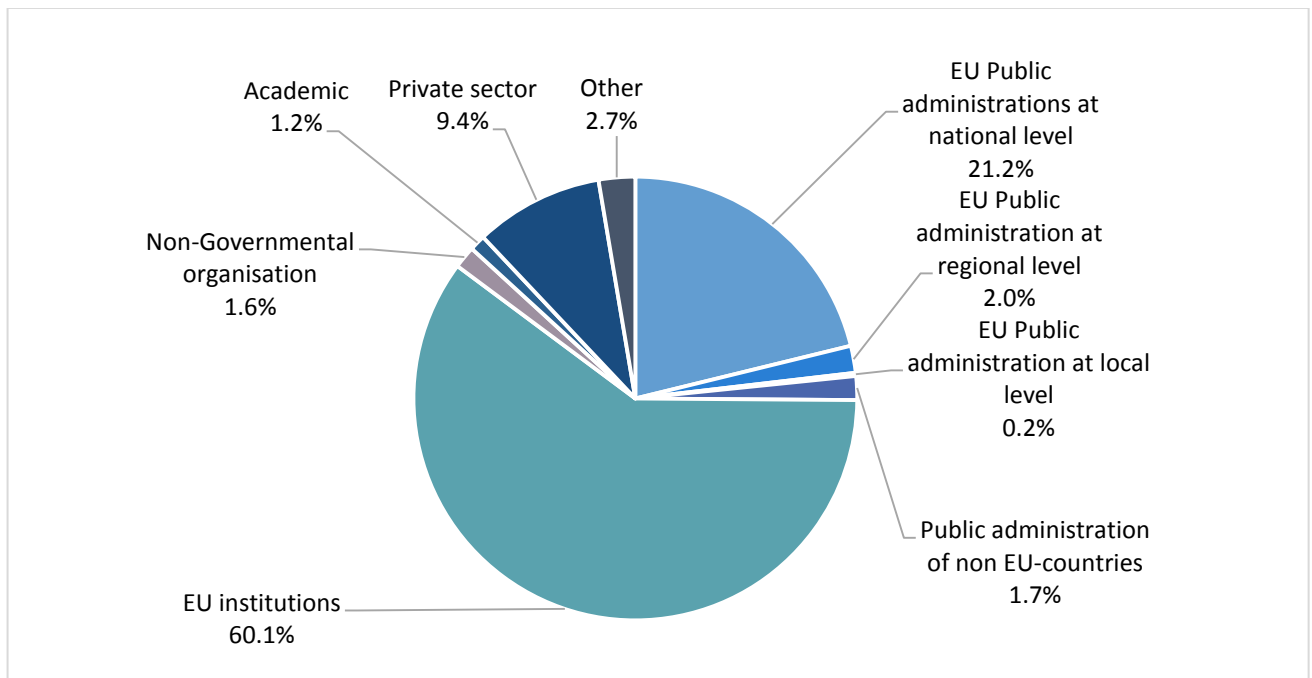
Figure 13 presents the respondents' roles within the CIRCABC application and how often the respondents with those roles use CIRCABC. In total, almost half of all respondents (423) have the Leader or Category Administrator role in the application, followed by 223 (26%) survey participants that have the Observer role. Most of the respondents use CIRCABC either several times a week or several times a month. Seven respondents have never used it.

FIGURE 13 – RESPONDENTS' CIRCABC ROLES AND USAGE FREQUENCY

4.1.2. Overall Survey Response Overview

Figure 3 gives an overview of the overall survey results. The statements were graded based on the users who responded 'Yes' to the skip logic question (a question that directs a respondent to a series of questions based on their responses).

Access and personal Data: To what extent do you agree with the following statements? n= 864

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ1: Only the necessary personal data are provided for authentication	26%	49%	9%	1%		15%	4.17
PQ2: The data provided are used for the specified reason only	23%	42%	13%	1%		22%	4.11

Are you external CIRCABC user? n= 349

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ3: It was easy to create an ECAS account for logging to CIRCABC	19%	50%	16%	8%	4%	3%	3.76
PQ4: The creation of the username and password is secure	20%	49%	16%	1%	1%	12%	4.00
PQ5: There were no delays in receiving an email with a link to the change-password area of ECAS	32%	44%	12%	2%	1%	10%	4.17

Collabritive features : To what extent do you agree with the following statements? n= 864

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ6: The CIRCABC interface is user-friendly	3%	33%	22%	26%	15%	1%	2.83
PQ7: The CIRCABC site map is well organised	2%	28%	28%	25%	11%	6%	2.85
PQ8: CIRCABC is adapted to my business needs	4%	42%	27%	16%	9%	3%	3.17
PQ9: Information on CIRCABC is downloaded/uploaded quickly	11%	44%	17%	15%	10%	4%	3.33
PQ10: CIRCABC is available and accessible whenever I need	12%	53%	15%	11%	6%	3%	3.57
PQ11: CIRCABC performs my requests successfully at the first time	8%	41%	21%	17%	10%	3%	3.21
PQ12: I am satisfied with the overall performance of CIRCABC	6%	39%	23%	19%	12%	1%	3.08
PQ13: I consider the CIRCABC search as effective	3%	19%	25%	17%	13%	23%	2.79
PQ14: CIRCABC is close to an ideal information resource centre	2%	18%	32%	21%	20%	7%	2.57

Administrative features for authors, observers, moderators, others: To what extent do you agree with the following statements? n= 441

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ15: It is easy to apply for membership of groups	7%	33%	24%	6%	5%	25%	3.41
PQ16: I had no issues with finding a specific document uploaded in the particular IG	4%	26%	24%	17%	11%	18%	2.96

Administrative features for leaders, category administrators: To what extent do you agree with the following statements? n= 423

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ17: It is easy to create a new IG in CIRCABC	7%	35%	18%	9%	2%	29%	3.49
PQ18: It is easy to invite new users	11%	47%	14%	13%	3%	12%	3.57
PQ19: It is easy to manage the access rights of the users	8%	41%	16%	18%	6%	12%	3.30
PQ20: It is easy to manage the IG visibility (Public access & Registered access)	3%	27%	22%	14%	4%	29%	3.16
PQ21: The process of recovering the deleted items is clear and fast	1%	11%	20%	6%	3%	59%	3.02

Library : To what extent do you agree with the following statements? n= 864

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ22: It is easy to create a folder in the Library	13%	40%	14%	5%	3%	25%	3.75
PQ23: It is easy to upload a new document to the Library	15%	41%	13%	7%	3%	22%	3.73
PQ24: I had no issues with editing the item properties	8%	28%	19%	13%	4%	27%	3.31
PQ25: It is easy to create a multilingual document	2%	11%	19%	3%	2%	61%	3.22
PQ26: The check-out/check-in mechanism is straightforward	4%	21%	21%	10%	5%	40%	3.15
PQ27: It is easy to unlock the document	2%	16%	20%	7%	4%	51%	3.12
PQ28: The process of copying and moving the items is fast	4%	19%	21%	15%	6%	36%	2.98
PQ29: It is easy to upload several documents, i.e. bulk upload, multiple upload	3%	16%	19%	9%	7%	45%	2.98
PQ30: It is easy to download several documents, i.e. bulk download	3%	17%	20%	9%	7%	43%	3.00
PQ31: It is easy to create links to the documents	3%	15%	21%	9%	6%	47%	2.99

Support service: Have you ever contacted the CIRCABC helpdesk? n= 321

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Not applicable/ No opinion	Average
PQ32: It is easy to reach out to the CIRCABC helpdesk	12%	53%	14%	11%	8%	2%	3.50
PQ33: The CIRCABC helpdesk shows a sincere interest in solving users' problems	19%	49%	16%	6%	7%	3%	3.69
PQ34: The CIRCABC helpdesk provides prompt replies to the users' inquiries in an acceptable timeframe	17%	49%	14%	9%	9%	2%	3.57
PQ35: The CIRCABC helpdesk treated my request/ticket professionally and in due time	16%	50%	17%	6%	8%	3%	3.62

Legend: ■ Strongly Agree ■ Agree ■ Neither Agree nor Disagree ■ Disagree ■ Strongly Disagree ■ Not applicable/ No opinion

n - number of the respondents who assessed the criteria

4.1.3. Comments and Recommendations

The Action 2.5 survey collected a significant amount of feedback and recommendations. This subsection provides the main trends presented; a complete list of comments and recommendations is included in the Appendix, in Section 6.4.

The commentaries were collected from respondents who chose a 'Disagree' or 'Strongly Disagree' option to at least one of the survey statements. The collected comments were grouped according to the grouping that was used in the survey design:

- Access and Personal Data;
- Collaborative Features;
- Administrative Features;
- Support Service.

Regarding the Access and Personal Data criteria, many respondents indicated difficulties and delays with the process of gaining access to the application and Interest Groups, as well as issues with using the ECAS system password.

Regarding the Collaborative Features criteria, respondents indicated that the system is clumsy and slow and that the user interface is unintuitive and not user-friendly. Many comments noted that the application has bugs that causes it to crash when performing several activities, e.g., initially loading the application, uploading multiple documents, searching for Interest Groups, and others. Some respondents also expressed the opinion that they preferred to use the old CIRCA system.

Regarding the Administrative Features criteria, the comments present that respondents have issues with adding new and managing existing user rights within the Interest Groups. Various comments also point to the problems with the interface, terminology and creating links to documents.

Regarding the Support Service criteria, the main commentaries respondents provided are that the response time of the Support Service is too long and the replies are not always helpful.

The main commentary trends are supported by the comment excerpts that are included in the Table 10.

TABLE 10 – ACTION 2.5 RESPONDENT COMMENTS

Access and Personal Data	The application for membership is not an easy process. Applicants in my country regularly have problems. They get to the step that provides them with a user name but something happens between that step and me (as Administrator) getting the email notification of their application for membership. I often don't get the email. Something breaks down in the process at that stage.
	Creating an account was a royal pain. It took several email exchanges with EU administrators to get it right. I have no idea why this was. The policy of forcing periodic password changes is also very unhelpful. Most secure systems do not do this, because it actually reduces security (as well as being very inconvenient).
	I see no need in asking for my mobile phone number when asking a new password. My computer has changed, so maybe ECAS doesn't recognise my computer. Anyway, ECAS is not user friendly as it does not give me a solution how to reach them to ask about my login problems.
Collaborative Features	Unreliable, user-unfriendly and buggy are the attributes that usually come to my mind.
	Not available to some users because technical issues. Not possible to use with Firefox because formatting of notifications text are deformed. Not possible to check the uploaded file before it is published (to avoid mistakes). Uploads of multiple documents does not always work properly if more than 5 files and takes very long or crashes.
	From a user's perspective, CIRCABC is too complex to use and is missing useful features. As a team member and project member I have used several systems, and CIRCABC was the most complex one. The system used by iMinds (myminds.be) has very useful features and is easy to use.
	Overall the tool is quite powerful to share the information among interested users. However it has a few drawbacks that can have a negative impact on its efficiency like the slowness of the website, the bugs that can occur while navigating on it (need for relogging sometimes) and the complexity of the links for instance.
Administrative Features	The user management is quite complex and is not always strait forward. It is not intuitive and further guidelines are required in order to succeed. The process of creating spaces inside the IG frequently crashes without success. If the user wants to open documents from different IG/Spaces he needs to use 2 different browsers (providing different user sessions).
	The management of users (add new users, delete existing users, knowing the access rights of users, etc. is completely intransparent. I was unable to understand the logic

	that is in this part of CIRCABC. Very bad! not even the assistant doing this job for several years now can assure me that certain persons get some alert messages and others not! This MUST be changed!
	It takes some time to trace a document if you are not familiar with the folders.
	Using the document structure (with folders etc.) is a mess due to the excessive response times.
Support Service	It is quite long to have an answer!
	It's difficult to find an email addresses to CircBC helpdesk. I had only one request and the reply came late (in addition: the transfer from Circa to CircaBC was a disaster).
	I submitted on 20 February a request to both the CIRCA helpdesk and the EC helpdesk, nobody replied in two months.

The respondent recommendations mainly suggest improvements in the application and server speed, user interface and redesign of the core CIRCABC functionalities. Table 11 presents excerpts from the list of recommendations.

TABLE 11 – ACTION 2.4 RESPONDENT RECOMMENDATIONS

Recommendations	Re-engineer it completely, but keep the concept.
	Modernize the interface to be more "App" like, the current interface is very cluttered and confusing to the average user. Hide most of the document management features by default and only turn then on if necessary on a group/library basis. Modernize the collaborative features to match the current trends (microblogging, like, rating, commenting, group & personal tagging, sharing, follow etc) as per Yammer.
	CIRCABC is a very useful and necessary tool. However it has lots of problems, most of the times it does not function properly, which is discouraging. External users turn to us too often for help and instructions to access the IG.
	The entire system should be re-conceptualized and possibly reduced to provide the basic functionality, rather than a set of features that nobody needs while neglecting important features.

4.1.4. Result Analysis According to the Evaluation Criteria

This section presents the method used for Perceived Quality score calculations. In order to obtain more accurate results, mean, mode, standard deviation and standard error values have been calculated.

Before performing the calculations, the 5-point Likert scale range values need to be interpreted as numeric values, i.e.:

- 5 – Strongly Agree;
- 4 – Agree;
- 3 – Neither Agree nor Disagree;
- 2 – Disagree;
- 1 – Strongly Disagree;
- 0 – No opinion/ not applicable **was not considered for the calculation**.

Mean and mode are used in statistics and hereafter in this report for measuring the Perceived Quality evaluation criteria:

- The **mean**[18] (average) is the most popular measure of location or central tendency; has the desirable mathematical property of minimizing the variance. To get the mean, you add up the values[19] for each case and divide that sum by the total number of cases;
- **Mode** refers to the most frequent, repeated or common value[19] in the quantitative or qualitative data. In some cases it is possible that there are several modes or none.

 In order to measure the degree of dispersion of a probability distribution, i.e. how far the data points are from the average, the standard deviation and standard error values are applied:

- **Standard deviation**[20] shows the spread, variability or dispersion of scores in a distribution of scores. It is a measure of the average amount the scores in a distribution deviate from the mean. The more widely the scores are spread out, the larger the standard deviation;
- **Standard error**[20] is the standard deviation of the sampling distribution of a statistic. It is a measure of sampling error; it refers to error in estimates due to random fluctuations in samples. It goes down as the number of cases goes up. The smaller the standard error, the better the sample statistic is as an estimate of the population parameter – at least under most conditions.

Based on the survey methodology presented in Section 3, the statements related to the Perceived Quality were mapped to four dimensions. The detailed mapping of the statements is described in Section 6.1.

---

[18] Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 226).
[19] 5-point Likert scale range values are interpreted as numeric values like described in Section 4.1.4.
[20] Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 375).

4.1.4.1. RESULT ANALYSIS ON STATEMENT LEVEL

Table 12 presents the detailed analysis of each Perceived Quality statement.

TABLE 12 – ACTION 2.5 PERCEIVED QUALITY SCORE DETAILS AT STATEMENT LEVEL

Statement	Mean	Mode	StDev	StErr	Dimension
PQ1: Only the necessary personal data are provided for authentication	4.17	4	0.68	0.03	Security/Privacy (Trust)
PQ2: The data provided are used for the specified reason only	4.11	4	0.70	0.03	Security/Privacy (Trust)
PQ3: It was easy to create an ECAS account for logging to CIRCABC	3.76	4	1.00	0.06	Efficiency
PQ4: The creation of the username and password is secure	4.00	4	0.74	0.05	Security/Privacy (Trust)
PQ5: There were no delays in receiving an email with a link to the change-password area of ECAS	4.17	4	0.80	0.05	Reliability
PQ6: The CIRCABC interface is user-friendly	2.83	4	1.15	0.04	Efficiency
PQ7: The CIRCABC site map is well organised	2.85	4	1.07	0.04	Efficiency
PQ8: CIRCABC is well customised to my business needs	3.17	4	1.04	0.04	Efficiency
PQ9: Information on CIRCABC is downloaded/uploaded quickly	3.33	4	1.17	0.05	Reliability
PQ10: CIRCABC is available and accessible whenever I need	3.57	4	1.04	0.04	Reliability
PQ11: CIRCABC performs my requests successfully at the first time	3.21	4	1.14	0.04	Reliability
PQ12: I am satisfied with the overall performance of CIRCABC	3.08	4	1.15	0.04	Reliability
					Security/Privacy (Trust)
					Efficiency
					Support
PQ13: I consider the CIRCABC search as effective	2.79	3	1.13	0.05	Efficiency
PQ14: CIRCABC is close to an ideal information resource centre	2.57	3	1.09	0.04	Reliability
					Security/Privacy (Trust)
					Efficiency
					Support
PQ15: It is easy to apply for membership of groups	3.41	4	1.00	0.06	Efficiency
PQ16: I had no issues with finding a specific document uploaded in the particular IG	2.96	4	1.13	0.06	Efficiency
PQ17: It is easy to create a new IG in CIRCABC	3.49	4	0.96	0.06	Efficiency
PQ18: It is easy to invite new users	3.57	4	1.00	0.06	Efficiency
PQ19: It is easy to manage the access rights of the users	3.30	4	1.10	0.06	Efficiency

Statement	Mean	Mode	StDev	StErr	Dimension
PQ20: It is easy to manage the IG visibility (Public access & Registered access)	3.16	4	0.99	0.06	Efficiency
PQ21: The process of recovering the deleted items is clear and fast	3.02	3	0.92	0.07	Efficiency
					Reliability
PQ22: It is easy to create a folder in the Library	3.75	4	0.96	0.04	Efficiency
PQ23: It is easy to upload a new document to the Library	3.73	4	1.00	0.04	Efficiency
PQ24: I had no issues with editing the item properties	3.31	4	1.08	0.05	Efficiency
					Reliability
PQ25: It is easy to create a multilingual document	3.22	3	0.90	0.05	Efficiency
PQ26: The check-out/check-in mechanism is straightforward	3.15	3	1.02	0.05	Efficiency
PQ27: It is easy to unlock the document	3.12	3	0.97	0.05	Efficiency
PQ28: The process of copying and moving the items is fast	2.98	3	1.08	0.05	Reliability
PQ29: It is easy to upload several documents, i.e. bulk upload, multiple upload	2.98	3	1.10	0.06	Reliability
PQ30: It is easy to download several documents, i.e. bulk download	3.00	3	1.10	0.05	Reliability
PQ31: It easy to create links to the documents	2.99	3	1.05	0.05	Efficiency
PQ32: It is easy to reach out to the CIRCABC helpdesk	3.50	4	1.11	0.07	Support
PQ33: The CIRCABC helpdesk shows a sincere interest in solving users' problems	3.69	4	1.10	0.07	Support
PQ34: The CIRCABC helpdesk provides prompt replies to the users' inquires in an acceptable timeframe	3.57	4	1.15	0.07	Support
PQ35: The CIRCABC helpdesk treated my request/ticket professionally and in due time	3.62	4	1.10	0.07	Support

4.1.4.2. OVERALL PERCEIVED QUALITY RESULT ANALYSIS

Table 13 gives an overview on the analysis of each Perceived Quality dimension as well as a total score of the Perceived Quality evaluation criteria.

In order to make the total Perceived Quality score calculation more accurate, a weighted mean[21] was used. The dimension weight is defined based on the amount of statements within a specific dimension. All four perceived quality dimensions were considered as applicable for the Action 2.5.

The weighted average of the Perceived Quality is 3.22, on a scale from 1 to 5, where 5 is the maximum (best) value.

The standard deviation is equal to 1.12, indicating that the users' opinion was spread out over a wide range of values.

TABLE 13 – ACTION 2.5 PERCEIVED QUALITY SCORE DETAILS

	Mean	Mode	StDev	StErr	Dimension	Weight
Per dimension	3.16	4	1.11	0.02	Efficiency	0.49
	3.16	4	1.20	0.03	Support	0.12
	3.18	4	1.15	0.02	Reliability	0.26
	3.49	4	1.14	0.02	Security/Privacy (Trust)	0.26
Perceived Quality	**3.22**[21]	**4**	**1.12**	**0.01**		

Figure 14 gives a visual overview on the Perceived Quality coverage per four predefined dimensions.

FIGURE 14 – ACTION 2.5 PERCEIVED QUALITY AGGREGATION

---

[21] Weighted mean is a procedure for combining the means of two or more groups of different sizes; it takes the sizes of the groups into account when computing the overall or grand mean.

4.2. STRENGTHS AND WEAKNESSES OF CIRCABC

This section provides an overview of the strong and weak aspects of the CIRCABC application, as revealed by the Action 2.5 Perceived Quality survey statement scores.

Prioritization of the statements were made based on the mean value of each statement. Statements with nearby mean values were grouped into three different clusters to which the following colours have been applied:

- A Green colour applies to statements that refer to the strong aspects of CIRCABC;
- A Grey colour applies to statements that refer to the aspects that require attention. For those statements respondent opinion was spread proportionally between 'Agree' and 'Disagree';
- An Orange colour applies to statements that refer to the weak aspects of CIRCABC. Weaknesses of those aspects are confirmed by the low rating scores and feedback provided in Section 4.1.3.

Table 14 gives an overview of the aspects that are strong, require attention or are weak of CIRCABC in the context of Perceived Quality.

TABLE 14 – ACTION 2.5 PERCEIVED QUALITY STRENGTHS AND WEAKNESSES

Perceived Quality statement	Mean	Dimension
PQ1: Only the necessary personal data are provided for authentication	4.17	Security/Privacy (Trust)
PQ5: There were no delays in receiving an email with a link to the change-password area of ECAS	4.17	Reliability
PQ2: The data provided are used for the specified reason only	4.11	Security/Privacy (Trust)
PQ4: The creation of the username and password is secure	4.00	Security/Privacy (Trust)
PQ3: It was easy to create an ECAS account for logging to CIRCABC	3.76	Efficiency
PQ22: It is easy to create a folder in the Library	3.75	Efficiency
PQ23: It is easy to upload a new document to the Library	3.73	Efficiency
PQ33: The CIRCABC helpdesk shows a sincere interest in solving users' problems	3.69	Support
PQ35: The CIRCABC helpdesk treated my request/ticket professionally and in due time	3.62	Support
PQ34: The CIRCABC helpdesk provides prompt replies to the users' inquires in an acceptable timeframe	3.57	Support
PQ18: It is easy to invite new users	3.57	Efficiency
PQ10: CIRCABC is available and accessible whenever I need	3.57	Reliability
PQ32: It is easy to reach out to the CIRCABC helpdesk	3.50	Support
PQ17: It is easy to create a new IG in CIRCABC	3.49	Efficiency
PQ15: It is easy to apply for membership of groups	3.41	Efficiency
PQ9: Information on CIRCABC is downloaded/uploaded quickly	3.33	Reliability

Perceived Quality statement	Mean	Dimension
PQ24: I had no issues with editing the item properties	3.31	Reliability
		Efficiency
PQ19: It is easy to manage the access rights of the users	3.30	Efficiency
PQ25: It is easy to create a multilingual document	3.22	Efficiency
PQ11: CIRCABC performs my requests successfully at the first time	3.21	Reliability
PQ8: CIRCABC is well customised to my business needs	3.17	Efficiency
PQ20: It is easy to manage the IG visibility (Public access & Registered access)	3.16	Efficiency
PQ26: The check-out/check-in mechanism is straightforward	3.15	Efficiency
PQ27: It is easy to unlock the document	3.12	Efficiency
PQ12: I am satisfied with the overall performance of CIRCABC	3.08	Reliability
		Security/Privacy (Trust)
		Efficiency
		Support
PQ21: The process of recovering the deleted items is clear and fast	3.02	Reliability
		Efficiency
PQ30: It is easy to download several documents, i.e. bulk download	3.00	Reliability
PQ31: It easy to create links to the documents	2.99	Efficiency
PQ28: The process of copying and moving the items is fast	2.98	Reliability
PQ29: It is easy to upload several documents, i.e. bulk upload, multiple upload	2.98	Reliability
PQ16: I had no issues with finding a specific document uploaded in the particular IG	2.96	Efficiency
PQ7: The CIRCABC site map is well organised	2.85	Efficiency
PQ6: The CIRCABC interface is user-friendly	2.83	Efficiency
PQ13: I consider the CIRCABC search as effective	2.79	Efficiency
PQ14: CIRCABC is close to an ideal information resource centre	2.57	Reliability
		Security/Privacy (Trust)
		Efficiency
		Support

5. CONCLUSIONS AND RECOMMENDATIONS

The objective of the survey was to evaluate the Perceived Quality of the Communication and Information Resource Centre for Administrations, Businesses and Citizens (CIRCABC) and to recognize the aspects that might require improvement.

In general, the overall Perceived Quality score (3.22 out of 5) and the respondents' commentary indicate that there are various aspects of the application that require improvement. From four Perceived Quality dimensions, the CIRCABC Security/Privacy aspect was valued the highest, the lowest rating was for the application's Efficiency and Support dimensions.

The following conclusions have been drawn based on the analysis performed:

o   There is a need for a communication and information resource centre, however CIRCABC is not the best technical solution as a resource centre;
o   The application interface was found as unintuitive and rather hard to navigate;
o   Users are not satisfied with the application's performance (speed, stability);
o   The findings present that the Support Service response time and the helpfulness of the responses are rather low.

Based on the conclusions drawn, CGI-Accenture adduces the following recommendations:

o   The application's user interface and structure should be redesigned, as well as the bugs should be fixed;
o   The processes of gaining and managing access rights, as well as other collaborative features should be improved to increase the user friendliness;
o   The Support Service quality and response time should be improved.

6. APPENDIX

6.1. STATEMENT MAPPING TO DIMENSIONS

In order to measure the Perceived Quality of the Action 2.5 and calculate the average score of each dimension, all survey statements were mapped to the dimensions according to the evaluation criteria.

Table 15 shows the statements mapping according to four dimensions of the Action 2.5 Perceived Quality.

TABLE 15 – ACTION 2.5 PERCEIVED QUALITY STATEMENT MAPPING TO DIMENSION

Question	ID	Efficiency	Security/Privacy (Trust)	Reliability	Support	Count of areas covered by question
Only the necessary personal data are provided for authentication	PQ1		✓			1
The data provided are used for the specified reason only	PQ2		✓			1
It was easy to create an ECAS account for logging to CIRCABC	PQ3	✓				1
The creation of the username and password is secure	PQ4		✓			1
There were no delays in receiving an email with a link to the change-password area of ECAS	PQ5			✓		1
The CIRCABC interface is user-friendly	PQ6	✓				1
The CIRCABC site map is well organised	PQ7	✓				1
CIRCABC is well customised to my business needs	PQ8	✓				1
Information on CIRCABC is downloaded/uploaded quickly	PQ9			✓		1
CIRCABC is available and accessible whenever I need	PQ10			✓		1
CIRCABC performs my requests successfully at the first time	PQ11			✓		1
I am satisfied with the overall performance of CIRCABC	PQ12	✓	✓	✓	✓	4
I consider the CIRCABC search as effective	PQ13	✓				1
CIRCABC is close to an ideal information resource centre	PQ14	✓	✓	✓	✓	4
It is easy to apply for membership of groups	PQ15	✓				1
I had no issues with finding a specific document uploaded in the particular IG	PQ16	✓				1
It is easy to create a new IG in CIRCABC	PQ17	✓				1
It is easy to invite new users	PQ18	✓				1
It is easy to manage the access rights of the users	PQ19	✓				1

Question	ID	Efficiency	Security/Privacy (Trust)	Reliability	Support	Count of areas covered by question
It is easy to manage the IG visibility (Public access & Registered access)	PQ20	✓				1
The process of recovering the deleted items is clear and fast	PQ21	✓		✓		2
It is easy to create a folder in the Library	PQ22	✓				1
It is easy to upload a new document to the Library	PQ23	✓				1
I had no issues with editing the item properties	PQ24	✓		✓		2
It is easy to create a multilingual document	PQ25	✓				1
The check-out/check-in mechanism is straightforward	PQ26	✓				1
It is easy to unlock the document	PQ27	✓				1
The process of copying and moving the items is fast	PQ28			✓		1
It is easy to upload several documents, i.e. bulk upload, multiple upload	PQ29			✓		1
It is easy to download several documents, i.e. bulk download	PQ30			✓		1
It easy to create links to the documents	PQ31	✓				1
It is easy to reach out to the CIRCABC helpdesk	PQ32				✓	1
The CIRCABC helpdesk shows a sincere interest in solving users' problems	PQ33				✓	1
The CIRCABC helpdesk provides prompt replies to the users' inquires in an acceptable timeframe	PQ34				✓	1
The CIRCABC helpdesk treated my request/ticket professionally and in due time	PQ35				✓	1
# of questions covering dimension		21	5	11	6	
% of questions covering dimension		60%	14%	31%	17%	

6.2. STATUS OF THE RESPONDENTS AGREED TO BE CONTACTED

108 Action 2.5 Perceived Quality survey respondents agreed to be contacted to participate in the product evolution (User group). The list of persons has been transmitted to DIGIT/ISA and is not provided in this document for the confidentiality reasons.

6.3. RAW DATA EXPORT

The attached file provides the survey result export.

RawDataExport.xls

6.4. RESPONDENT COMMENTS AND RECOMMENDATIONS

The attached file provides all respondent comments and recommendations.

ME-D0305-CIRCABC
-CommentsRecomme

6.5. GLOSSARY

- The mean[18] (average) is the most popular measure of location or central tendency; has the desirable mathematical property of minimizing the variance. To get the mean, you add up the values[19] for each case and divide that sum by the total number of cases;

- Mode refers to the most frequent, repeated or common value[19] in the quantitative or qualitative data. In some cases it is possible that there are several modes or none;

- Standard deviation[20] shows the spread, variability or dispersion of scores in a distribution of scores. It is a measure of the average amount the scores in a distribution deviate from the mean. The more widely the scores are spread out, the larger the standard deviation;

- Standard error[20] is the standard deviation of the sampling distribution of a statistic. It is a measure of sampling error; it refers to error in estimates due to random fluctuations in samples. It goes down as the number of cases goes up. The smaller the standard error, the better the sample statistic is as an estimate of the population parameter – at least under most conditions;

- 'Perceived Quality' is defined as the extent to which the outputs of an ISA action are meeting its direct beneficiaries' expectations[15];

- A Likert Scale is a widely used scaling method developed by Rensis Likert. Likert scale refers to the use of an ordinal 4- or 5-point rating scale with each point anchored or labelled;

- Weighted mean is a procedure for combining the means of two or more groups of different sizes; it takes the sizes of the groups into account when computing the overall or grand mean.