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**INTEROPERABILITY SOLUTIONS FOR  
EUROPEAN PUBLIC ADMINISTRATIONS  
MONITORING AND EVALUATION  
D03.05/D03.06 ACTION 1.12 PERCEIVED QUALITY AND  
UTILITY MONITORING REPORT**

Framework Contract n° DI/07173

31<sup>st</sup> July 2015

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## EXECUTIVE SUMMARY

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

The survey for measuring the Perceived Quality and Utility of Action 1.12 – Open Source Software (OCS) for online collection of statements of support for European Citizens’ Initiatives (ECI), was launched at the second semester of 2014. The objective of the survey was to evaluate the Perceived Quality and Utility of the OCS among the ECI organisers. More specifically, the goal of the survey was to understand to what extent the service is user-friendly and to analyse the online collection process and its baseline, as currently composed of two main scenarios, i.e.:

- Scenario 1: the original architecture of the online collection systems, as defined in the ECI Regulation<sup>1</sup> and related Commission Implementing Regulation No 1179/2011<sup>2</sup> (hosting to be found and borne by the organisers who can use the software developed by the Commission or any other software).
- Scenario 2: The temporary solution proposed by the Commission (hosting on the Commission’s servers, using the software developed by the Commission).

The survey was designed in the EUSurvey tool and distributed by e-mail to 21 ECI organisers. The replies were received from 5 ECI organisers, i.e.:

- An End to Front Companies in Order to Secure a Fairer Europe Institutions
- End Ecocide in Europe: A Citizens’ Initiative to Give the Earth Rights
- EU Directive on Dairy Cow Welfare
- European Free Vaping Initiative
- Fraternité 2020 - Mobility. Progress. Europe.

The survey was launched on the 1<sup>st</sup> of December 2014 and was active until the 15<sup>th</sup> of January 2015. In total, 5 ECI organisers responded to the survey, which accounts for 24% of the total amount of recipients.

The survey result analysis (see Table 1) shows the Action 1.12 – OCS for online collection of statements of support for ECI, Perceived Quality and Utility scores. The **Perceived Quality score** is **2.63** (scale: 1...5) and the **Utility score** is **4.72** (scale: 1...5).

The detailed score calculation process is described in Section 4.2.3.

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<sup>1</sup> REGULATION (EU) No 211/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 February 2011 on the citizens’ initiative

<sup>2</sup> COMMISSION IMPLEMENTING REGULATION (EU) No 1179/2011 of 17 November 2011 laying down technical specifications for online collection systems pursuant to Regulation (EU) No 211/2011 of the European Parliament and of the Council on the citizens’ initiative

TABLE 1 – ACTION 1.12 SURVEY RESULTS

Evaluation criteria	Mean <sup>3</sup>	Mode <sup>3</sup>	StDev <sup>3</sup>	StErr <sup>3</sup>
Action 1.12 Perceived Quality	2.63	4	1.39	0.16
Action 1.12 Utility	4.72	5	0.46	0.07

**Conclusion:** Based on the survey data analysis, the OCS for online collection of statements of support for ECI offered by the Commission meets its main objectives. The majority of respondents indicated the software hosting platform offered by the Commission to be beneficial in terms of data protection and saving time and costs. The support provided by the European Commission all along the online collection process (including the certification process) was highly evaluated by the respondents.

However, there is a need for drawing a special attention to the ‘look and feel’, i.e. to the design of the software, as well as the overall perception of Scenario 2 based on the feedback and recommendations provided in Sections 4.2.1.1 and 4.2.1.2 weaknesses presented in Section 4.3.

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<sup>3</sup> see Glossary (Section 6.3)

## REVISION HISTORY

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Date	Version	Description	Authors	Approved by
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	
18-May-2015	0.10	Initial version	CGI-Accenture	

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# 1. INTRODUCTION

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CGI-Accenture has been requested to deliver a Perceived Quality and Utility 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 and Utility measurements for Action 1.12 – Open Source Software (OCS) for online collection of statements of support for European Citizens’ Initiatives (ECI).

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 methodology used for the Perceived Quality and Utility measurements;
- **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:
  - Statement mapping per dimensions;
  - Raw data export;
  - Glossary.



## 2. SURVEY METHODOLOGY

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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 Action 1.12. This section explains how the Perceived Quality and Utility are measured and what dimensions are covered under each evaluation criterion. 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.**<sup>4</sup>

Perceived Quality is measured using the eGovQual scale model<sup>5</sup>.

The assessment is based on the following dimensions:

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

### 2.2. UTILITY

**‘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**<sup>6</sup>.

Utility is measured using an adaptation of the VAST (Value ASsessment Tool) methodology<sup>7</sup>, considering an additional dimension related to the Global and Intermediate objectives of the ISA programme.

The assessment is based on the following dimensions:

- **Value for the European Union:** Looks at the assessment of the external value of an information system or an IT project. External value of a project is considered to be any benefit which is delivered outside the Commission itself. This external aspect is divided into two parts: society (Social Value) and individuals (External Users’ Value);
- **Value for the European Commission:** Encompasses criteria through which the internal value of an IT project can be assessed. All factors that can contribute to the improvement of the EC performance should be considered as delivering an internal value;

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<sup>4</sup> DG BUDG (2004), “Evaluating EU activities, a practical guide for the Commission services”

<sup>5</sup> eGovQual scale developed by Papadomichelaki and Mentzas (2012)

<sup>6</sup> DG BUDG (2004), “Evaluating EU activities, a practical guide for the Commission services”

<sup>7</sup> More information can be found on: <http://ec.europa.eu/dgs/informatics/vast/>

- **Value for cross-border and cross-sector interoperability:** Covers all aspects of how information system or IT project can support the efficient and effective cross-border and cross-sector interaction between the European Public Administrations.

**The ISA Programme is mainly focusing on the value for the cross-border and cross-sector interoperability dimension. In this context, the value for EC is considered to have a lower weight than other dimensions. Consequently, less focus is put on this dimension.**

## 2.3. SURVEY ARCHITECTURE

In order to measure the Perceived Quality and Utility a respondent is supposed to grade the statements based on his/her level of agreement. A 5-point Likert scale<sup>8</sup> 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’.

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<sup>8</sup> 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 1.12 SURVEY DATA SUMMARY

CGI-Accenture are delivering the given survey data analysis report taking into account the survey conducted by KURT SALMON. In this context, the survey by KURT SALMON was analysed from the approved methodology perspective, i.e. to what extent the conducted survey is adapted to the methodology dimensions used by CGI-Accenture in the Utility and Perceived Quality surveys of other ISA Programme actions.

Table 2 gives an overview on the survey start date, end date, the amount of responses collected, the amount of responses excluded from the analysis, as well as the survey launching method.

**TABLE 2 – ACTION 1.12 SURVEY DATA SUMMARY**

Action 1.12 – OCS for ECI	
Start date:	01/12/2014
End date:	15/01/2015
Sample size:	21
Amount of responses:	5
The survey launching method:	E-mail notification

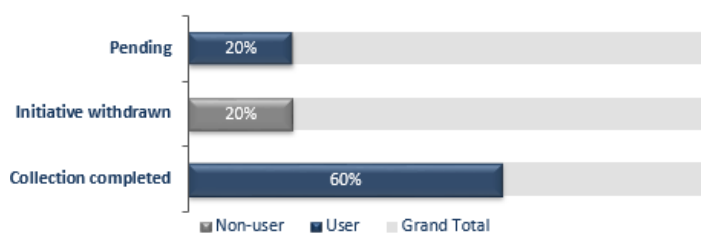
### 4. ACTION 1.12 SURVEY RESULTS AND ANALYSIS

This section aims to provide a detailed survey analysis and to represent the results depending on the ECI status and software user type within the Action 1.12 Perceived Quality and Utility evaluation criteria.

#### 4.1. ECI STATUS LEVEL ANALYSIS

Figure 1 shows the ECI status by the software user type. 80% of software users have the ECI statement of support collection collected, pending (due to the certification process) or withdrawn (due to the decision of running a standard petition instead, using own software).

**FIGURE 1 – ECI STATUS BY THE SOFTWARE USER TYPE**



## 4.2. ACTION 1.12 SURVEY RESULT OVERVIEW

This section aims at providing an overview on the survey response range at the following levels:

- **Overall Survey Response Overview** shows a complete survey response range collection covered by the Action 1.12 Perceived Quality and Utility survey;
- **Result Overview According to the Evaluation Criteria** shows the survey response range per statement depending on the evaluation criteria (Perceived Quality or Utility);
- **Result analysis according to the evaluation criteria** provides a score calculation by evaluation criteria dimension and the overall evaluation criteria score.

### 4.2.1. Overall Survey Response Overview

Figure 2 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).

FIGURE 2 – OVERALL ACTION 1.12 SURVEY RESPONSE OVERVIEW



#### 4.2.1.1. USER FEEDBACK ON FUNCTIONALITY

Table 3 gives a detailed overview of the feedback received for Action 1.12. It should be noted that this feedback was provided once the user chose a ‘Disagree’ or ‘Strongly Disagree’ option to evaluate the survey statement.

**TABLE 3 – ACTION 1.12 USER FEEDBACK**

<b>Scenario 1 Overall Perception</b>	Too expensive and time-consuming for ordinary citizens without financial resources to achieve anything.
	Too expensive to build its own software that complies with the ECI Regulation (and works). These costs are huge and detrimental to the campaign (as they swallow huge amounts of campaign finance).
	- Too expensive - Not feasible for an ECI organisers' committee composed of volunteers only
	Simplification needed: An Avaaz-like procedure would be more easily accepted by the citizens.
<b>Scenario 2 Overall Perception</b>	The ideal would be that the European Commission offers to host all ECI online collection systems but also allow more flexibility to customise the OCS as outlined
	The OCS need a lot of improvements. There are a number of great signature collection platforms that already exist (e.g. change.org). Why did the Commission feel the need to develop their own (unattractive) software rather than use a proven and existing platform?
	Long procedure, but this is also related to the requirements of the Treaty (decision of the Member States to provide sometimes a lot of private information)
<b>Online Collection Process</b>	Scenario 2 is definitely closer to the ideal but many more improvements are still needed on the OCS.
	Process straightforward when organisers have the knowledge and prior experience needed in this field. For a non-IT person it is most likely an overwhelmingly difficult process: Enterprise Java, cryptography, live DVD, etc. are not easy for the average ECI organiser.
	Need for a lot of time and resources to manage and maintain the Online Collection System throughout the year (e.g. 2 IT volunteers spent a lot of time on the system) Difficult to ensure an equivalent commitment to IT all throughout, especially when the work is performed by volunteers only.

#### 4.2.1.2. USER RECOMMENDATIONS

Table 4 gives a detailed overview of the recommendations received for Action 1.12.

**TABLE 4 – ACTION 1.12 USER RECOMMENDATIONS**

Recommendations	Need to make it clear for new ECI organisers that they can certify their system before the ECI is registered.
	The ECI is meant to facilitate greater democracy in the EU. This is a great idea in theory, but in practice it does not currently do that: too onerous data requirements, software not suited to campaigning, cost of running a successful campaign potentially very high, ECI process not widely known amongst the public (the Commission should embark on raising awareness of the ECI process), 'Successful' ECIs too easily dismissed, lack of transparency in why ECIs are dismissed once successful, etc. The whole process needs a rethink.
	The online collection system should be managed by the European Commission and made available for free to ECI organisers, as it is in the United States. This also implies that ECI organisers would not have to fill-in the documents related to the system security (for the certification of the system).
	The one-year timeframe should only start when the online collection system is operational: due to a lot of misunderstanding with the European Commission services, the ECI organisers got their ECI accepted by the European Commission on 01.10.2014 but as the time of this survey ,their online collection system is still not operational. This may be harmful to the success of their ECI.
	The responsibility of ECI organisers towards the data collected should be re-considered. Recommendations (to ECI organisers): Otherwise, a lawyer or data protection expert should be consulted at the early stage of the ECI process as data collection represents a huge responsibility for the organisers: individuals (as representatives of the ECI Committee) indeed sign the contract, not organisations.
	The Register should contain easy link to signature page
	Better explain the information needed for the members of the ECI organisers' Committee.
	Map displaying the distribution of signatures collected (up-to-date as additional statements are collected) like it is done on the software.

#### 4.2.2. Result Overview According to the Evaluation Criteria

In order to provide an unbiased overview on the survey results, this section presents a comparison of the received replies depending on the user type and evaluation criteria. Before performing the calculations, the 5-point Likert scale range values need to be interpreted as numeric values, i.e.:

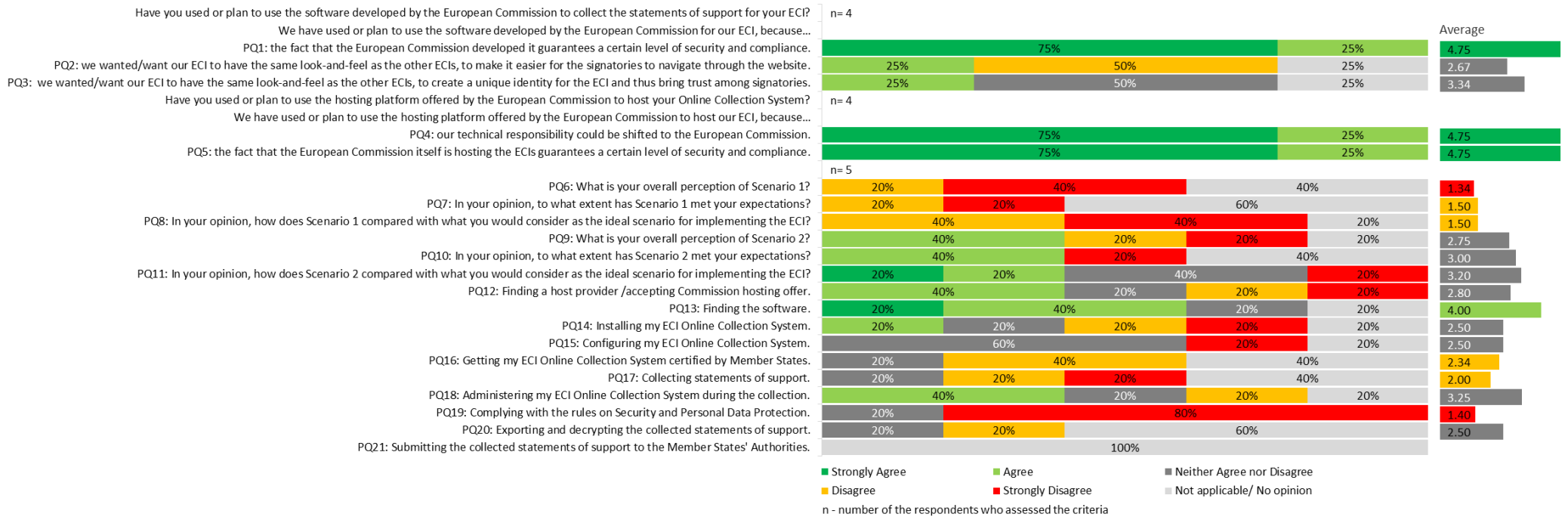
- 5 – Strongly Agree;
- 4 – Agree;
- 3 – Neither Agree nor Disagree;
- 2 – Disagree;
- 1 – Strongly Disagree;
- 0 – No opinion/ not applicable **was not considered for the calculation.**

4.2.2.1. PERCEIVED QUALITY OF THE ACTION 1.12

This subsection gives an overview on the Perceived Quality results of Action 1.12 – Open Source Software (OCS) for online collection of statements of support for European Citizens’ Initiatives (ECI).

Figure 3 gives an overview on the Perceived Quality results provided by 5 ECI organizers. 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).

FIGURE 3 – ACTION 1.12 PERCEIVED QUALITY STATEMENTS COMPARISON



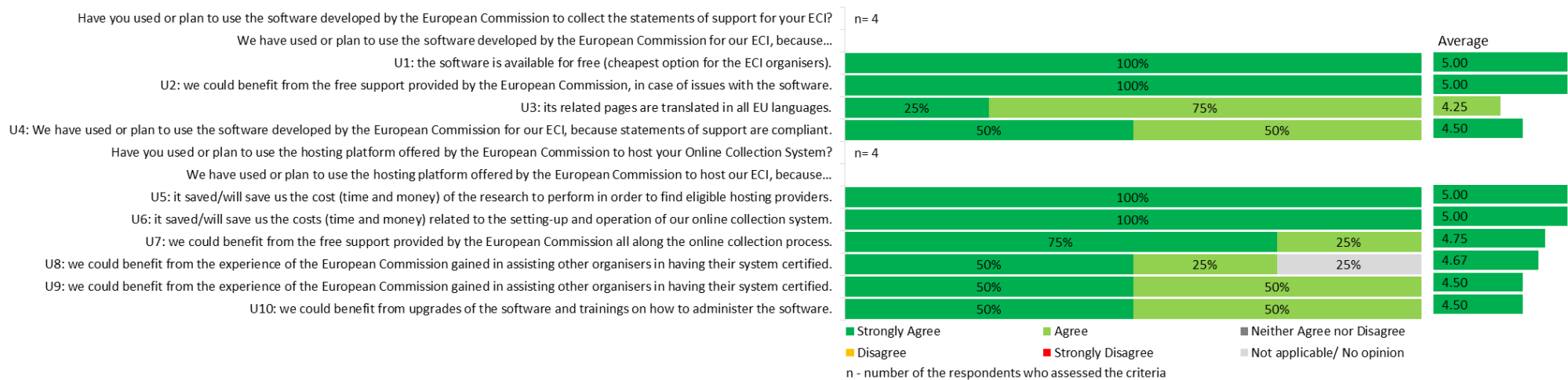


#### 4.2.2.2. UTILITY OF THE ACTION 1.12

This subsection gives an overview of the Utility results of Action 1.12 – Open Source Software (OCS) for online collection of statements of support for European Citizens’ Initiatives (ECI) based on users’ opinion.

Figure 4 gives an overview of the utility results provided by the active users. The statements were graded based on those users who responded ‘Yes’ to the skip logic question (a question that directs a respondent to a series of questions based on their responses).

**FIGURE 4 – ACTION 1.12 UTILITY STATEMENTS COMPARISON**



### 4.2.3. Result Analysis According to the Evaluation Criteria

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

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

- The **mean**<sup>9</sup> (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<sup>10</sup> for each case and divide that sum by the total number of cases;
- **Mode** refers to the most frequent, repeated or common value<sup>10</sup> 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**<sup>11</sup> 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**<sup>11</sup> 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 2, the statements related to the Perceived Quality were mapped to four dimensions and the statements related to the Utility were mapped to three dimensions. The detailed mapping of the statements is described in Section 6.1.

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<sup>9</sup> Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 226).

<sup>10</sup> 5-point Likert scale range values are interpreted as numeric values like described in Section 4.2.2.

<sup>11</sup> Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 375).

#### 4.2.3.1. PERCEIVED QUALITY OF THE ACTION 1.12

Table 5 presents the detailed analysis of each Perceived Quality statement.

**TABLE 5 – ACTION 1.12 PERCEIVED QUALITY SCORE DETAILS AT STATEMENT LEVEL**

Statement	Mean	Mode	StDev	StErr	Dimension
PQ1: We have used or plan to use the software developed by the European Commission for our ECI, because the fact that the European Commission developed it guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	4.75	5	0.50	0.23	Security/Privacy (Trust)
PQ2: We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to make it easier for the signatories to navigate through the website.	2.67	2	1.16	0.58	Efficiency
PQ3: We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to create a unique identity for the ECI and thus bring trust among signatories.	3.34	3	0.58	0.29	Security/Privacy (Trust)
PQ4: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because our technical responsibility could be shifted to the European Commission, even though we remained liable for the data collected and processed (lower risks).	4.75	5	0.50	0.23	Support
PQ5: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because the fact that the European Commission itself is hosting the ECIs guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	4.75	5	0.50	0.23	Security/Privacy (Trust)
PQ6: What is your overall perception of Scenario 1?	1.34	1	0.58	0.34	Efficiency
					Security/Privacy (Trust)
					Reliability
					Support
PQ7: In your opinion, to what extent has Scenario 1 met your expectations?	1.50	1; 2	0.71	0.50	Efficiency
					Security/Privacy (Trust)
					Reliability
					Support
PQ8: In your opinion, how does Scenario 1 compared with what you would consider as the ideal scenario for implementing the ECI?	1.50	1	0.58	0.29	Efficiency
					Security/Privacy (Trust)

Statement	Mean	Mode	StDev	StErr	Dimension
					Reliability
					Support
					Efficiency
PQ9: What is your overall perception of Scenario 2?	2.75	4	1.50	0.75	Security/Privacy (Trust)
					Reliability
					Support
					Efficiency
PQ10: In your opinion, to what extent has Scenario 2 met your expectations?	3.00	4	1.74	1.00	Security/Privacy (Trust)
					Reliability
					Support
					Efficiency
PQ11: In your opinion, how does Scenario 2 compared with what you would consider as the ideal scenario for implementing the ECI?	3.20	3	1.49	0.67	Security/Privacy (Trust)
					Reliability
					Support
PQ12: Finding a host provider /accepting Commission hosting offer.	2.80	4	1.31	0.59	Efficiency
PQ13: Finding the software.	4.00	4	0.82	0.41	Efficiency
PQ14: Installing my ECI Online Collection System.	2.50	1; 2; 3; 4	1.30	0.65	Efficiency
					Reliability
PQ15: Configuring my ECI Online Collection System.	2.50	3	1.00	0.50	Efficiency
					Reliability
PQ16: Getting my ECI Online Collection System certified by Member States.	2.34	2	0.58	0.34	Security/Privacy (Trust)
PQ17: Collecting statements of support.	2.00	1; 2; 3	1.00	0.58	Reliability
PQ18: Administering my ECI Online Collection System during the collection.	3.25	4	0.96	0.48	Efficiency
PQ19: Complying with the rules on Security and Personal Data Protection.	1.40	1	0.90	0.40	Security/Privacy (Trust)
PQ20: Exporting and decrypting the collected statements of support.	2.50	2; 3	0.71	0.50	Efficiency
					Reliability
PQ21: Submitting the collected statements of support to the Member States' Authorities.	N/A	N/A	N/A	N/A	Efficiency

Table 6 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<sup>12</sup> 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 1.12.

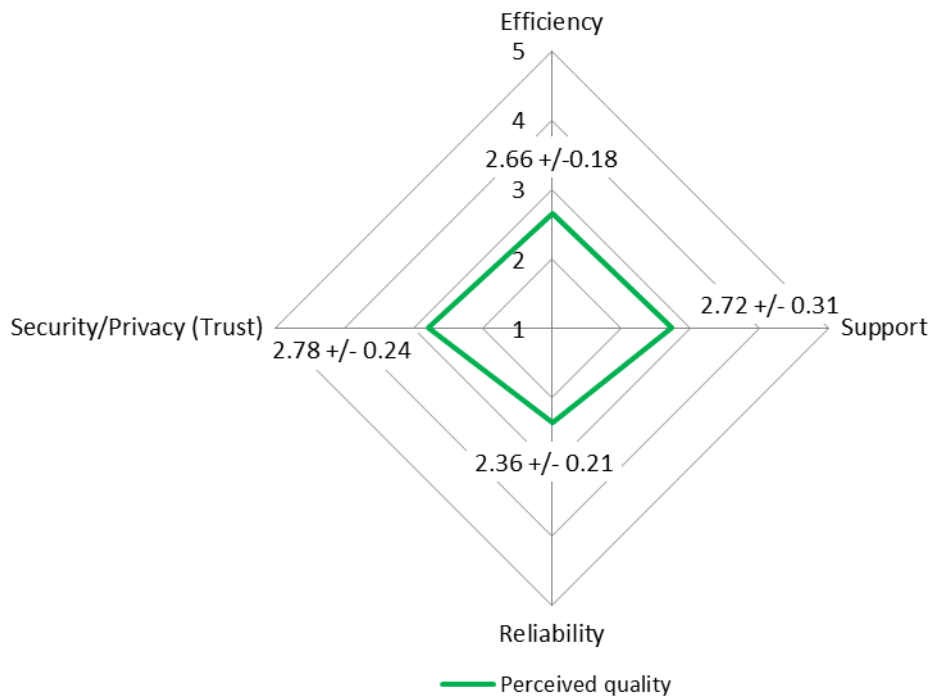
**Weighted average of the Perceived Quality is 2.63** in scale from 1 to 5, where 5 is the maximum (best) value. **Standard deviation is equal to 1.39** indicating that the users’ opinion was spread out over a wide range of values.

**TABLE 6 – ACTION 1.12 PERCEIVED QUALITY SCORE DETAILS**

	Mean	Mode	StDev	StErr	Dimension	Weight
Per dimension	2.66	5	1.24	0.18	Efficiency	0.33
	2.72	1	1.55	0.31	Support	0.17
	2.36	1	1.21	0.21	Reliability	0.24
	2.78	1	1.52	0.24	Security/Privacy (Trust)	0.26
<b>Perceived Quality</b>	<b>2.63<sup>12</sup></b>	<b>4</b>	<b>1.39</b>	<b>0.16</b>		

Figure 5 gives a visual overview on the Perceived Quality coverage per four predefined dimensions.

**FIGURE 5 – ACTION 1.12 PERCEIVED QUALITY AGGREGATION**



<sup>12</sup> 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.

#### 4.2.3.2. UTILITY OF THE ACTION 1.12

Table 7 presents the detailed analysis of each utility statement.

**TABLE 7 – ACTION 1.12 UTILITY SCORE DETAILS AT STATEMENT LEVEL**

Statement	Mean	Mode	StDev	StErr	Dimension
U1: We have used or plan to use the software developed by the European Commission for our ECI, because the software is available for free (cheapest option for the ECI organisers).	5.00	5	0.00	0.00	Value for EU
					Value for cross-border and cross-sector interoperability
U2: We have used or plan to use the software developed by the European Commission for our ECI, because we could benefit from the free support provided by the European Commission, in case of issues with the software.	5.00	5	0.00	0.00	Value for EU
					Value for cross-border and cross-sector interoperability
U3: We have used or plan to use the software developed by the European Commission for our ECI, because its related pages are translated in all EU languages.	4.25	4	0.50	0.23	Value for EU
					Value for cross-border and cross-sector interoperability
U4: We have used or plan to use the software developed by the European Commission for our ECI, because statements of support are compliant with the data requirements set across Member States.	4.50	4	0.58	0.26	Value for EU
					Value for cross-border and cross-sector interoperability
U5: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the cost (time and money) of the research to perform in order to find eligible hosting providers.	5.00	5	0.00	0.00	Value for EU
					Value for cross-border and cross-sector interoperability
U6: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the costs (time and money) related to the setting-up and operation of our online collection system as these services are provided free of charge by the European Commission .	5.00	5	0.00	0.00	Value for EU
					Value for cross-border and cross-sector interoperability
U7: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the free support provided by the European Commission all along the online collection process (including the certification process).	4.75	5	0.50	0.23	Value for EU
					Value for cross-border and cross-sector interoperability
U8: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the	4.67	5	0.58	0.29	Value for EU

Statement	Mean	Mode	StDev	StErr	Dimension
experience of the European Commission gained in assisting other organisers in having their system certified and thus learn from their experience and have a faster learning curve (for other ECIs potentially).					Value for cross-border and cross-sector interoperability
U9: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the experience of the European Commission gained in assisting other organisers in having their system certified and thus have a system certified faster than in Scenario 1.	4.50	4	0.58	0.26	Value for EU
					Value for cross-border and cross-sector interoperability
U10: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from upgrades of the software and trainings on how to administer the software.	4.50	4	0.58	0.26	Value for EU
					Value for cross-border and cross-sector interoperability

Table 8 gives an overview on the analysis of each Utility dimension as well as a total score for the utility evaluation criteria.

In order to make the total Utility score calculation more accurate, a weighted mean<sup>12</sup> was used. The dimension weight is defined based on the amount of statements within specific dimension.

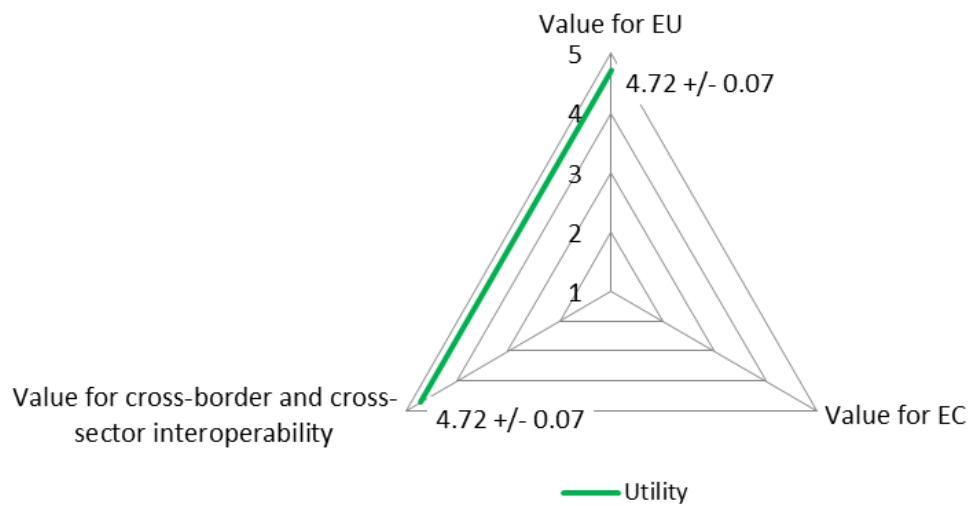
Weighted average of the Utility is **4.72** with the standard deviation equal to **0.46** on a scale from 1 to 5, where 5 is the maximum (best) value.

**TABLE 8 – ACTION 1.12 UTILITY SCORE DETAILS**

	MEAN	MODE	StDev	StErr	Dimension	Weight
Per dimension	4.72	5	0.46	0.07	Value for EU	0.5
	4.72	5	0.46	0.07	Value for cross-border and cross-sector interoperability	0.5
	-	-	-	-	Value for EC	-
Utility	<b>4.72<sup>12</sup></b>	<b>5</b>	<b>0.46</b>	<b>0.07</b>		

Figure 6 gives a visual overview on the Utility coverage per three predefined dimensions.

**FIGURE 6 – ACTION 1.12 UTILITY AGGREGATION**





### 4.3. STRENGTHS AND WEAKNESSES OF THE OPEN SOURCE SOFTWARE

This section aims at providing an overview of the strong and weak aspects of the Open Source Software for online collection revealed by the Action 1.12 Perceived Quality and Utility survey.

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 the Open Source Software for European Citizens’ Initiatives;
- 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 the Open Source Software for European Citizens’ Initiatives. Weaknesses of those aspects are confirmed by the feedbacks provided in Table 3 and Table 4.

#### 4.3.1. Perceived Quality of the Action 1.12

Table 9 gives an overview of the aspects that are strong, require attention or are weak of the Open Source Software for European Citizens’ Initiatives in the context of Perceived Quality.

**TABLE 9 – ACTION 1.12 PERCEIVED QUALITY STRENGTHS AND WEAKNESSES**

Perceived Quality statement	Mean	Dimension
PQ1: We have used or plan to use the software developed by the European Commission for our ECI, because the fact that the European Commission developed it guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	4.75	Security/Privacy (Trust)
PQ4: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because our technical responsibility could be shifted to the European Commission, even though we remained liable for the data collected and processed (lower risks).	4.75	Support
PQ5: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because the fact that the European Commission itself is hosting the ECIs guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	4.75	Security/Privacy (Trust)
PQ13: Finding the software.	4.00	Efficiency
PQ3: We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to create a unique identity for the ECI and thus bring trust among signatories.	3.34	Security/Privacy (Trust)

Perceived Quality statement	Mean	Dimension
PQ18: Administering my ECI Online Collection System during the collection.	3.25	Efficiency
PQ11: In your opinion, how does Scenario 2 compared with what you would consider as the ideal scenario for implementing the ECI?	3.20	Efficiency
		Security/Privacy (Trust)
		Reliability
		Support
PQ10: In your opinion, to what extent has Scenario 2 met your expectations?	3.00	Efficiency
		Security/Privacy (Trust)
		Reliability
		Support
PQ12: Finding a host provider /accepting Commission hosting offer.	2.80	Efficiency
PQ9: What is your overall perception of Scenario 2?	2.75	Efficiency
		Security/Privacy (Trust)
		Reliability
		Support
PQ2: We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to make it easier for the signatories to navigate through the website.	2.67	Efficiency
PQ14: Installing my ECI Online Collection System.	2.50	Efficiency
		Reliability
PQ15: Configuring my ECI Online Collection System.	2.50	Efficiency
		Reliability
PQ20: Exporting and decrypting the collected statements of support.	2.50	Efficiency
		Reliability
PQ16: Getting my ECI Online Collection System certified by Member States.	2.34	Security/Privacy (Trust)
PQ17: Collecting statements of support.	2.00	Reliability
PQ7: In your opinion, to what extent has Scenario 1 met your expectations?	1.50	Efficiency
		Security/Privacy (Trust)
		Reliability
		Support
	1.50	Efficiency

Perceived Quality statement	Mean	Dimension
PQ8: In your opinion, how does Scenario 1 compared with what you would consider as the ideal scenario for implementing the ECI?		Security/Privacy (Trust)
		Reliability
		Support
PQ19: Complying with the rules on Security and Personal Data Protection.	1.40	Security/Privacy (Trust)
PQ6: What is your overall perception of Scenario 1?	1.34	Efficiency
		Security/Privacy (Trust)
		Reliability
		Support
PQ21: Submitting the collected statements of support to the Member States' Authorities.	N/A	Efficiency

### 4.3.2. Utility of the Action 1.12

Table 10 presents an overview of the aspects that are strong, require attention or are weak of the Open Source Software for European Citizens’ Initiatives in the context of Utility.

**TABLE 10 – ACTION 1.12 UTILITY STRENGTHS AND WEAKNESSES**

Utility statement	Mean	Dimension
U1: We have used or plan to use the software developed by the European Commission for our ECI, because the software is available for free (cheapest option for the ECI organisers).	5.00	Value for EU
		Value for cross-border and cross-sector interoperability
U2: We have used or plan to use the software developed by the European Commission for our ECI, because we could benefit from the free support provided by the European Commission, in case of issues with the software.	5.00	Value for EU
		Value for cross-border and cross-sector interoperability
U5: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the cost (time and money) of the research to perform in order to find eligible hosting providers.	5.00	Value for EU
		Value for cross-border and cross-sector interoperability
U6: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the costs (time and money) related to the setting-up and operation of our online collection system as these services are provided free of charge by the European Commission.	5.00	Value for EU
		Value for cross-border and cross-sector interoperability
U7: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the free support provided by the European Commission all along the online collection process (including the certification process).	4.75	Value for EU
		Value for cross-border and cross-sector interoperability
U8: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the experience of the European Commission gained in assisting other organisers in having their system certified and thus learn from their experience and have a faster learning curve (for other ECIs potentially).	4.67	Value for EU
		Value for cross-border and cross-sector interoperability
U4: We have used or plan to use the software developed by the European Commission for our ECI, because statements of support are compliant with the data requirements set across Member States.	4.50	Value for EU
		Value for cross-border and cross-sector interoperability
U9: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the experience of the European Commission gained in assisting other organisers in having their system certified and thus have a system certified faster than in Scenario 1.	4.50	Value for EU
		Value for cross-border and cross-sector interoperability

Utility statement	Mean	Dimension
<p>U10: We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from upgrades of the software and trainings on how to administer the software.</p>	4.50	Value for EU
		Value for cross-border and cross-sector interoperability
<p>U3: We have used or plan to use the software developed by the European Commission for our ECI, because its related pages are translated in all EU languages.</p>	4.25	Value for EU
		Value for cross-border and cross-sector interoperability

## 5. CONCLUSIONS AND RECOMMENDATIONS

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The objective of the survey was to evaluate the Perceived Quality and Utility of Action 1.12 – Open Source Software (OCS) for online collection of statements of support for European Citizens’ Initiatives (ECI)

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

- Perceived Quality:
  - The ECI organisers indicated that the software and the hosting platform developed by the European Commission for the ECI provide a high level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011;
  - The ECI organisers gained benefit from the technical support provided by the European Commission;
  - The software interface was found as unattractive and rather hard to navigate;
  - The overall perception of Scenario 2 in comparison with Scenario 1 has significantly improved, however it still requires an improvement.
- Utility:
  - The ECI organisers indicated the software and the hosting platform developed by the European Commission for the ECI as beneficial in terms of saving time and costs;
  - The respondents appreciated the ECI related pages are translated in all EU languages;
  - The respondents lacked an awareness, i.e. the information needed for the members of the ECI organisers’ Committee.

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

- Perceived Quality:
  - The ‘look and feel’ of the software should be made more attractive and less ‘bureaucratic’;
  - The online collection process should be simplified as there is a number of ECI organisers with no IT background. As ECI organisers work with a limited budget, it is difficult for them affording the IT support.
  - The processes of installing, configuring, exporting and decrypting the collected statements of support should be simplified.
- Utility:
  - To make it clear for new ECI organisers that they can certify their system before the ECI is registered;
  - An awareness on the ECI process should be raised as well as the transparency of the reasons of dismissing ECI should be increased.

## 6. APPENDIX

### 6.1. STATEMENT MAPPING TO DIMENSIONS

In order to measure the Perceived Quality and Utility of the Action 1.12 and calculate the average score of each dimension, all survey statements were mapped to the dimensions according to the evaluation criteria.

Table 11 shows the statements mapping according to four dimensions of the Action 1.12 Perceived Quality.

**TABLE 11 – ACTION 1.12 PERCEIVED QUALITY STATEMENT MAPPING TO DIMENSION**

Question	ID	Efficiency	Security/Privacy (Trust)	Reliability	Support	Count of areas covered by question
We have used or plan to use the software developed by the European Commission for our ECI, because the fact that the European Commission developed it guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	PQ1		✓			1
We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to make it easier for the signatories to navigate through the website.	PQ2	✓				1
We have used or plan to use the software developed by the European Commission for our ECI, because we wanted/want our ECI to have the same look-and-feel as the other ECIs, to create a unique identity for the ECI and thus bring trust among signatories.	PQ3		✓			1
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because our technical responsibility could be shifted to the European Commission, even though we remained liable for the data collected and processed (lower risks).	PQ4				✓	1
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because the fact that the European Commission itself is hosting the ECIs guarantees a certain level of security and compliance with the ECI Regulation and related Commission Implementing Regulation N°1179/2011.	PQ5		✓			1
What is your overall perception of Scenario 1?	PQ6	✓	✓	✓	✓	4
In your opinion, to what extent has Scenario 1 met your expectations?	PQ7	✓	✓	✓	✓	4
In your opinion, how does Scenario 1 compared with what you would consider as the ideal scenario for implementing the ECI?	PQ8	✓	✓	✓	✓	4
What is your overall perception of Scenario 2?	PQ9	✓	✓	✓	✓	4

Question	ID	Efficiency	Security/Privacy (Trust)	Reliability	Support	Count of areas covered by question
In your opinion, to what extent has Scenario 2 met your expectations?	PQ10	✓	✓	✓	✓	4
In your opinion, how does Scenario 2 compared with what you would consider as the ideal scenario for implementing the ECI?	PQ11	✓	✓	✓	✓	4
Finding a host provider /accepting Commission hosting offer.	PQ12	✓				1
Finding the software.	PQ13	✓				1
Installing my ECI Online Collection System	PQ14	✓		✓		2
Configuring my ECI Online Collection System	PQ15	✓		✓		2
Getting my ECI Online Collection System certified by Member States.	PQ16		✓			1
Collecting statements of support.	PQ17			✓		1
Administering my ECI Online Collection System during the collection.	PQ18	✓				1
Complying with the rules on Security and Personal Data Protection.	PQ19		✓			1
Exporting and decrypting the collected statements of support.	PQ20	✓		✓		2
Submitting the collected statements of support to the Member States' Authorities.	PQ21	✓				1
<b># of questions covering dimension</b>		14	11	10	7	
<b>% of questions covering dimension</b>		66%	52%	47%	33%	



Table 12 shows the statement mapping according to three dimensions of the Action 1.12 Utility.

**TABLE 12 – ACTION 1.12 UTILITY STATEMENT MAPPING TO DIMENSION**

Question	ID	Value for EU	Value for EC	Value for cross-border and cross-sector interoperability	Count of areas covered by question
We have used or plan to use the software developed by the European Commission for our ECI, because the software is available for free (cheapest option for the ECI organisers).	U1	✓		✓	2
We have used or plan to use the software developed by the European Commission for our ECI, because we could benefit from the free support provided by the European Commission, in case of issues with the software.	U2	✓		✓	2
We have used or plan to use the software developed by the European Commission for our ECI, because its related pages are translated in all EU languages.	U3	✓		✓	2
We have used or plan to use the software developed by the European Commission for our ECI, because statements of support are compliant with the data requirements set across Member States.	U4	✓		✓	2
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the cost (time and money) of the research to perform in order to find eligible hosting providers.	U5	✓		✓	2
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because it saved/will save us the costs (time and money) related to the setting-up and operation of our online collection system as these services are provided free of charge by the European Commission.	U6	✓		✓	2
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the free support provided by the European Commission all along the online collection process (including the certification process).	U7	✓		✓	2
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the experience of the European Commission gained in assisting other organisers in having their system certified and thus learn from their experience and have a faster learning curve (for other ECIs potentially).	U8	✓		✓	2

Question	ID	Value for EU	Value for EC	Value for cross-border and cross-sector interoperability	Count of areas covered by question
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from the experience of the European Commission gained in assisting other organisers in having their system certified and thus have a system certified faster than in Scenario 1.	U9	✓		✓	2
We have used or plan to use the hosting platform offered by the European Commission to host our ECI, because we could benefit from upgrades of the software and trainings on how to administer the software.	U10	✓		✓	2
<b># of questions covering dimension</b>		10	0	10	
<b>% of questions covering dimension</b>		100%	0%	100%	

## 6.2. RAW DATA EXPORT

The attached file provides the survey result export.



Raw Data - Action  
1.12.xls

### 6.3. GLOSSARY

- The mean<sup>9</sup> (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<sup>10</sup> for each case and divide that sum by the total number of cases;
- Mode refers to the most frequent, repeated or common value<sup>10</sup> in the quantitative or qualitative data. In some cases it is possible that there are several modes or none;
- Standard deviation<sup>11</sup> 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<sup>11</sup> 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<sup>4</sup>;
- '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<sup>6</sup>;
- 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.