



**INTEROPERABILITY SOLUTIONS FOR
EUROPEAN PUBLIC ADMINISTRATIONS
MONITORING AND EVALUATION
D03.05/D03.06 ACTION 1.8 PERCEIVED QUALITY AND
UTILITY 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.

© European Commission, 2015

EXECUTIVE SUMMARY

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

The goal of the Perceived Quality and Utility survey for Action 1.8 – Trusted Exchange Platform (e-TrustEx) was to evaluate the functionality and the content of the e-TrustEx Platform by conducting pilots among the Directorates-General (DG) of the European Commission.

The survey was launched during the last operational phase of Action 1.8, and the limited number of respondents is linked to the number of pilots that are organised to test the e-TrustEx Platform. The survey was designed in the EUSurvey tool and was distributed via e-mail to six pilot representatives on the 29th April 2015 by Digit-CIPA-Support team.

In total, only three pilot representatives responded to the survey. Consequently, the information presented in this report has an informative purpose and due to the small sample size the results do not present a statistically valid overview of the whole Action 1.8 Perceived Quality and Utility analysis.

The survey result analysis (see Table 1) shows the Action 1.8 Perceived Quality and Utility scores. The **Perceived Quality score** is **4.55** (scale: 1...5) and the **Utility score** is **4.60** (scale: 1...5). As the sample size is not valid to perform statistically meaningful mode, standard deviation and standard error calculations of the Perceived Quality and the Utility, these metrics have been excluded from the result analysis.

The detailed score calculation process is described in Section 4.2.

TABLE 1 – ACTION 1.8 SURVEY RESULTS

Evaluation criteria	Mean ¹
Action 1.8 Perceived Quality	4.55
Action 1.8 Utility	4.60

¹ See Glossary (Section **Error! Reference source not found.**)

Conclusions:

The following conclusions and recommendation relate directly to the conducted pilots and are only interpretation that can be biased by the small sample size and are to be treated with caution.

Overall, the users are satisfied with the e-TrustEx Platform performance. Based on the survey data analysis, the e-TrustEx Platform meets its main objectives and is beneficial in terms of the digital information exchange with European Administration and in time and cost saving. The support provided by e-TrustEx support team is well evaluated by the users.

However, there is a need for drawing attention to aspects such as the platform functionality improvement and increasing the user request resolving time by the support team.

REVISION HISTORY

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	
02-July-2015	0.20	Updated version, minor changes (typographical error)	CGI-Accenture	
19-June-2015	0.10	Updated version	CGI-Accenture	
17-June-2015	0.01	Initial version	CGI-Accenture	

TABLE OF CONTENTS

1	INTRODUCTION.....	8
2	SURVEY METHODOLOGY.....	9
2.1	PERCEIVED QUALITY	9
2.2	UTILITY	9
2.3	SURVEY ARCHITECTURE	10
3	ACTION 1.8 SURVEY DATA SUMMARY	11
4	ACTION 1.8 SURVEY RESULTS AND ANALYSIS.....	11
4.1	OVERALL SURVEY RESPONSE OVERVIEW	11
4.1.1	<i>User Feedback.....</i>	13
4.1.2	<i>Comments and Recommendations</i>	13
4.2	RESULT ANALYSIS ACCORDING TO THE EVALUATION CRITERIA	14
4.2.1	<i>Perceived Quality Result Analysis at Statement Level.....</i>	15
4.2.2	<i>Overall Perceived Quality Result Analysis.....</i>	16
4.2.3	<i>Utility Result Analysis at Statement Level</i>	17
4.2.4	<i>Overall Utility Result Analysis</i>	18
4.3	STRENGTHS AND WEAKNESSES	20
4.3.1	<i>Perceived Quality.....</i>	20
4.3.2	<i>Utility</i>	21
5	CONCLUSIONS AND RECOMMENDATIONS.....	23
6	APPENDIX	25
6.1	STATEMENT MAPPING TO DIMENSIONS	25
6.2	RAW DATA EXPORT	27
6.3	GLOSSARY	28

TABLE OF FIGURES

FIGURE 1 – OVERALL ACTION 1.8 SURVEY RESULT OVERVIEW	12
FIGURE 2 - PERCEIVED QUALITY SCORE AGGREGATION	17
FIGURE 3 – UTILITY SCORE AGGREGATION.....	19

TABLE OF TABLES

TABLE 1 – ACTION 1.8 SURVEY RESULTS.....	3
TABLE 2 – ACTION 1.8 SURVEY DATA SUMMARY.....	11
TABLE 3 – ACTION 1.8 USER FEEDBACK.....	13
TABLE 4 - RESPONDENT RECOMMENDATIONS	14
TABLE 5 – ACTION 1.8 PERCEIVED QUALITY SCORE DETAILS AT STATEMENT LEVEL.....	15
TABLE 6 - ACTION 1.8 PERCEIVED QUALITY SCORE DETAILS	16
TABLE 7 - ACTION 1.8 UTILITY SCORE DETAILS AT STATEMENT LEVEL	17
TABLE 8 - ACTION 1.8 UTILITY SCORE DETAILS	18
TABLE 9 - ACTION 1.8 PERCEIVED QUALITY STRENGTHS AND WEAKNESSES	20
TABLE 10 - ACTION 1.8 UTILITY STRENGTHS AND WEAKNESSES	21
TABLE 11 - ACTION 1.8 PERCEIVED QUALITY STATEMENT MAPPING TO DIMENSION	25
TABLE 12 - ACTION 1.8 UTILITY STATEMENT MAPPING TO DIMENSION.....	26

1 INTRODUCTION

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 nine actions and the Utility is to be measured for thirteen actions. This report covers the Perceived Quality and Utility measurements for Action 1.8 – e-TrustEx Platform.

The survey was launched during the last operational phase of the Action 1.8 and the limited number of respondents is linked to the number of pilots which are organised to test the e-TrustEx Platform. The information presented in this report has an informative purpose and due to the small sample size the results do not present a statistically valid overview of the whole Action 1.8 Perceived Quality and Utility.

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 the 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 0** appendix includes:
 - o Statement mapping to dimensions;
 - o Raw data export;
 - o Glossary.

2 SURVEY METHODOLOGY

A common methodology was developed by the previous ISA Monitoring and Evaluation contractor for all the surveys, which enables comparison between the different survey results. This methodology was also applied to evaluate Action 1.8. 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.**²

Perceived Quality is measured using the eGovQual scale model³.

The assessment is based on the following dimensions:

- **Efficiency:** measures the degree to which the service is easy to use;
- **Trust (Privacy):** measures the degree to which the user believes the site is safe from intrusion and protects personal information;
- **Reliability:** measures the feasibility and speed of accessing, using, and receiving services of the site;
- **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**⁴.

Utility is measured using an adaptation of the VAST (Value **AS**essment **T**ool) methodology⁵, 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;

² DG BUDG (2004), "Evaluating EU activities, a practical guide for the Commission services"

³ eGovQual scale developed by Papadomichelaki and Mentzas (2012)

⁴ DG BUDG (2004), "Evaluating EU activities, a practical guide for the Commission services"

⁵ 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 scale⁶ 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 (optional) 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'.

⁶ 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 1.8 SURVEY DATA SUMMARY

Table 2 gives an overview on the survey start date, end date, the amount of responses collected and the survey launching method.

TABLE 2 – ACTION 1.8 SURVEY DATA SUMMARY

Action 1.8 – e-TrustEx Platform	
Start date:	29/04/2015
End date:	16/06/2015
Reminders:	Email reminders sent on 19/05/2015 and 27/05/2015; Phone calls were made to invite stakeholders to participate in the survey
Amount of responses:	3
The survey launching method:	E-mail notification

4 ACTION 1.8 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:

- **Survey response overview** shows a complete survey response range collection covered by the Action 1.8 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 and Utility);
- **Result analysis according to the evaluation criteria** provides a score calculation by evaluation criteria dimension and the overall evaluation criteria score.

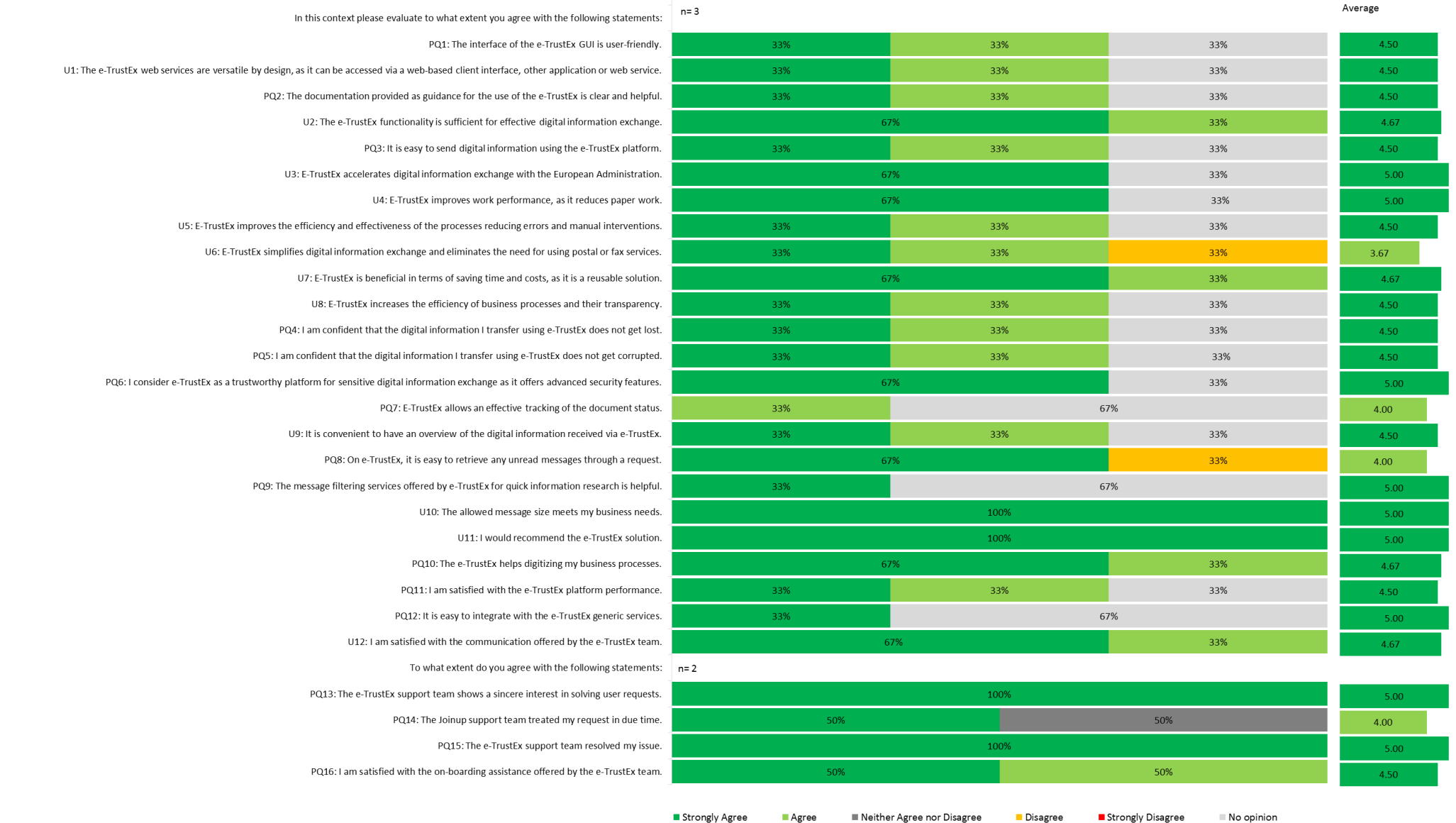
4.1 OVERALL SURVEY RESPONSE OVERVIEW

Figure 1 gives an overview of the overall survey results. The graphic presents the distribution of answers for each survey statement, as well as each statement's average score. The statements from PQ 13 to PQ 16 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).

Monitoring and Evaluation - e-TrustEx Platform Perceived Quality Utility Report July 2015

FIGURE 1 – OVERALL ACTION 1.8 SURVEY RESULT OVERVIEW

E-TrustEx is a platform offered for secure exchange of natively digital documents or scanned documents from system to system via standardised interfaces.



n - number of the respondents who assessed the criteria

* - a response rate is low for drawing meaningful statistical conclusions

4.1.1 User Feedback

Table 3 gives a detailed overview of the statements once the user chose the 'Disagree' or 'Strongly Disagree' option to evaluate the survey statement received for Action 1.8.

ERROR! REFERENCE SOURCE NOT FOUND. TABLE 3 – ACTION 1.8 USER FEEDBACK

Statement	User Feedback/Comments
U6: e-TrustEx simplifies digital information exchange and eliminates the need for using postal or fax services.	No additional user feedback/comments are provided for this specific statement.
PQ8: On e-TrustEx, it is easy to retrieve any unread messages through a request.	No additional user feedback/comments are provided for this specific statement.

*- The response rate is low for drawing meaningful statistical conclusions. Consequently, the analysis is for informative purposes only.

4.1.2 Comments and Recommendations

This section provides an overview of the overall recommendations received for Action 1.8. It should be noted that these responses are identified by a single survey respondent.

The recommendations are classified by the following groups:

- Technical integration of the e-TrustEx web services;
- Functionality of the e-TrustEx solution;
- Other.

Table 4 provides the overview of the recommendations:

TABLE 4 - RESPONDENT RECOMMENDATIONS

Technical integration of the e-TrustEx web services	Regarding the notification messages, the sending of these messages to the addressee needs to be preserved since the new version of e-TrustEx on 21.04.2015. The messages could be deleted when the status 'read' is obtained.
Functionality of the e-TrustEx solution	There could be the possibility to personalize the text of the notification depending on the addressee (National Parliaments, Permanent Delegations, Mission, Tiers) and the finality of the act (entry into force, information, etc).
Other	The possibility to pass via e-TrustEx the weekly transmission reports to the addressee generated by E-GREFFE could be added.

4.2 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 values have been calculated. A small sample size and low response rate is not valid to perform statistically meaningful mode, standard deviation and standard error calculations of the Perceived Quality and the Utility, therefore these metrics have been excluded from the result analysis.

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

- 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.**

The mean is used in statistics and hereafter in this report for measuring the Perceived Quality and Utility evaluation criteria.

The **mean**⁷ (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 values⁸ for each case and divide that sum by the total number of cases.

⁷ Dictionary of statistics & methodology: a nontechnical guide for the social sciences (page 226).

⁸ 5-point Likert scale range values are interpreted as numeric values like described in Section 4.24.2.

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.

4.2.1 Perceived Quality Result Analysis at Statement Level

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

TABLE 5 – ACTION 1.8 PERCEIVED QUALITY SCORE DETAILS AT STATEMENT LEVEL

Statement	Mean	Dimension
PQ1: The interface of the e-TrustEx GUI is user-friendly.	4.50	Efficiency
PQ2: The documentation provided as guidance for the use of the e-TrustEx is clear and helpful.	4.50	Efficiency
		Support
PQ3: It is easy to send digital information using the e-TrustEx platform.	4.50	Efficiency
PQ4: I am confident that the digital information I transfer using e-TrustEx does not get lost.	4.50	Security/Privacy (Trust)
		Reliability
PQ5: I am confident that the digital information I transfer using e-TrustEx does not get corrupted.	4.50	Security/Privacy (Trust)
		Reliability
PQ6: I consider e-TrustEx as a trustworthy platform for sensitive digital information exchange as it offers advanced security features.	5.00	Security/Privacy (Trust)
PQ7: E-TrustEx allows an effective tracking of the document status.	4.00	Efficiency
PQ8: On e-TrustEx, it is easy to retrieve any unread messages through a request.	4.00	Efficiency
PQ9: The message filtering services offered by e-TrustEx for quick information research is helpful.	5.00	Efficiency
PQ10: The e-TrustEx helps digitizing my business processes.	4.67	Efficiency
PQ11: I am satisfied with the e-TrustEx platform performance.	4.50	Efficiency
PQ12: It is easy to integrate with the e-TrustEx generic services.	5.00	Efficiency
PQ13: The e-TrustEx support team shows a sincere interest in solving user requests.	5.00	Support
PQ14: The Joinup support team treated my request in due time.	4.00	Support

Statement	Mean	Dimension
PQ15: The e-TrustEx support team resolved my issue.	5.00	Support
PQ16: I am satisfied with the on-boarding assistance offered by the e-TrustEx team.	4.50	Support

*- The response rate is low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

4.2.2 Overall Perceived Quality Result Analysis

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 mean¹ 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 1.8.

Weighted average of the Perceived Quality is 4.55 on a scale from 1 to 5, where 5 is the maximum (best) value.

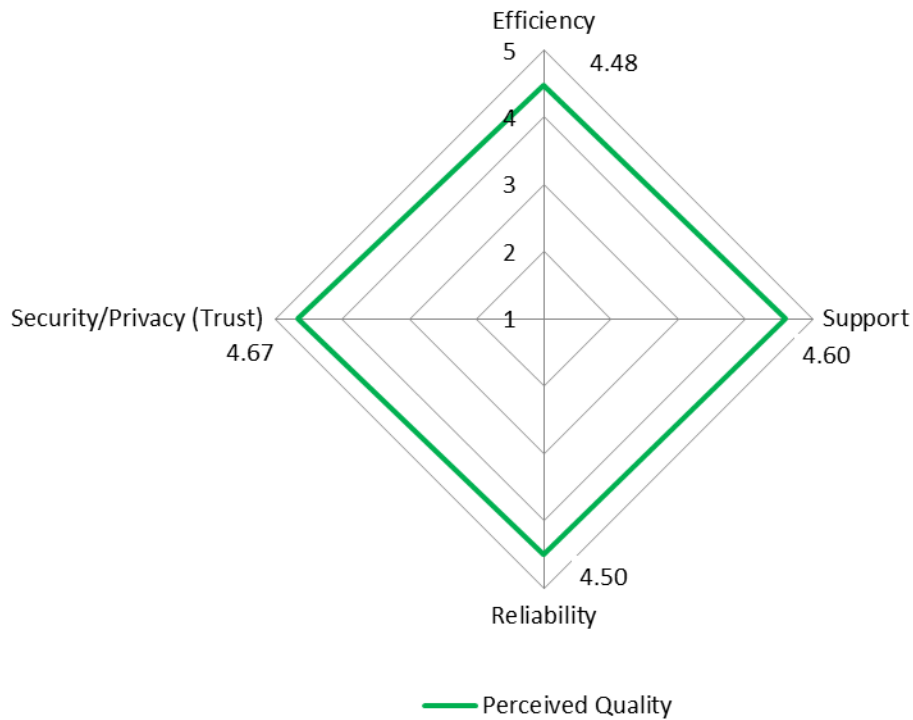
TABLE 6 - ACTION 1.8 PERCEIVED QUALITY SCORE DETAILS

	Mean	Dimension	Weight
Per dimension	4.48	Efficiency	0.47
	4.60	Support	0.26
	4.50	Reliability	0.11
	4.67	Security/Privacy (Trust)	0.16
Perceived Quality	4.55		

*- The response rate is too low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

Figure 2 provides a visual overview on the Perceived Quality coverage per four predefined dimensions.

FIGURE 2 - PERCEIVED QUALITY SCORE AGGREGATION



4.2.3 Utility Result Analysis at Statement Level

Table 7 presents the detailed analysis of each utility statement.

TABLE 7 - ACTION 1.8 UTILITY SCORE DETAILS AT STATEMENT LEVEL

Statement	Mean	Dimension
U1: The e-TrustEx web services are versatile by design, as it can be accessed via a web-based client interface, other application or web service.	4.50	Value for cross-border and cross-sector interoperability
U2: The e-TrustEx functionality is sufficient for effective digital information exchange.	4.67	Value for cross-border and cross-sector interoperability
U3: E-TrustEx accelerates digital information exchange with the European Administration.	5.00	Value for EU
U4: E-TrustEx improves work performance, as it reduces paper work.	5.00	Value for EU
U5: E-TrustEx improves the efficiency and effectiveness of the processes reducing errors and manual interventions.	4.50	Value for cross-border and cross-sector interoperability
U6: E-TrustEx simplifies digital information exchange and eliminates the need for using postal or fax services.	3.67	Value for EU
U7: E-TrustEx is beneficial in terms of saving time and costs, as it is a reusable solution.	4.67	Value for cross-border and cross-sector interoperability
U8: E-TrustEx increases the efficiency of business processes and their transparency.	4.50	Value for cross-border and cross-sector interoperability

Statement	Mean	Dimension
U9: It is convenient to have an overview of the digital information received via e-TrustEx.	4.50	Value for EU
U10: The allowed message size meets my business needs.	5.00	Value for EU
U11: I would recommend the e-TrustEx solution.	5.00	Value for cross-border and cross-sector interoperability
U12: I am satisfied with the communication offered by the e-TrustEx team.	4.67	Value for cross-border and cross-sector interoperability

*- The response rate is low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

4.2.4 Overall Utility Result Analysis

Table 8 - Action 1.8 Utility Score Details 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 was used. The dimension weight is defined based on the amount of statements within specific dimension. **Weighted average of the Utility is 4.60** on a scale from 1 to 5, where 5 is the maximum (best) value.

TABLE 8 - ACTION 1.8 UTILITY SCORE DETAILS

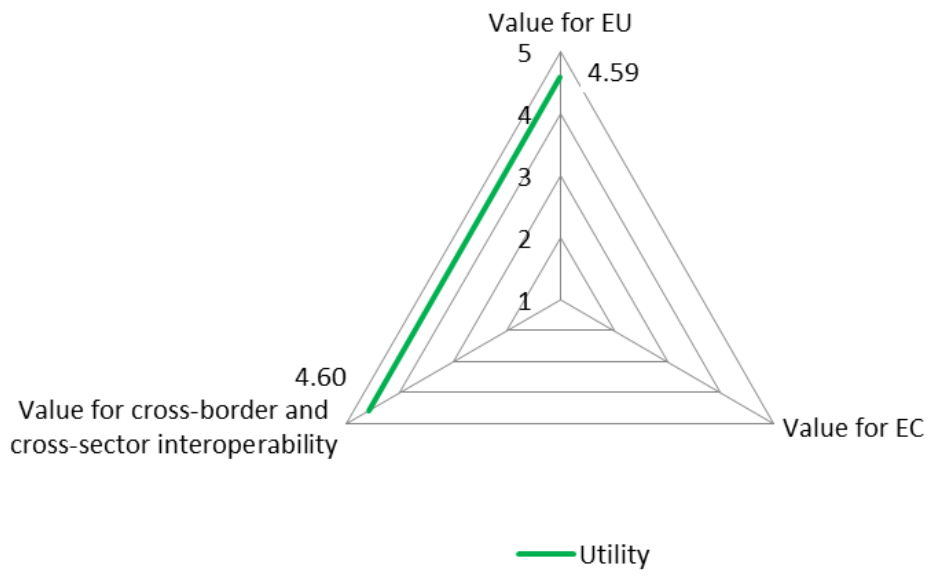
	MEAN	Dimension	Weight
Per dimension	4.59	Value for EU	0.36
	4.60	Value for cross-border and cross-sector interoperability	0.64
	-	Value for EC	-
Utility	4.60⁹		

*- The response rate is too low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

Figure 3 gives a visual overview on the Utility coverage per two predefined dimensions.

⁹ 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.

FIGURE 3 – UTILITY SCORE AGGREGATION



4.3 STRENGTHS AND WEAKNESSES

This section provides an overview of the strong and weak aspects of the e-TrustEx Platform.

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

- A **Green** colour applies to statements that refer to e-TrustEx Platform's overall strong aspects;
- A **Grey** colour applies to statements that refer to the aspects that require attention;
- An **Orange** colour applies to statements that refer to e-TrustEx Platform's weak aspects.

4.3.1 Perceived Quality

Table 9 gives an overview of the aspects that are strong, require attention or are weak of the e-TrustEx Platform in the context of Perceived Quality. Due to high overall ratings, no aspects were classified as weak, therefore no statements were marked with orange colour.

TABLE 9 - ACTION 1.8 PERCEIVED QUALITY STRENGTHS AND WEAKNESSES

Statement	Mean	Dimension
PQ6: I consider e-TrustEx as a trustworthy platform for sensitive digital information exchange as it offers advanced security features.	5.00	Security/Privacy (Trust)
PQ9: The message filtering services offered by e-TrustEx for quick information research is helpful.	5.00	Efficiency
PQ12: It is easy to integrate with the e-TrustEx generic services.	5.00	Efficiency
PQ13: The e-TrustEx support team shows a sincere interest in solving user requests.	5.00	Support
PQ15: The e-TrustEx support team resolved my issue.	5.00	Support
PQ10: The e-TrustEx helps digitizing my business processes.	4.67	Efficiency
PQ1: The interface of the e-TrustEx GUI is user-friendly.	4.50	Efficiency
PQ2: The documentation provided as guidance for the use of the e-TrustEx is clear and helpful.	4.50	Efficiency
		Support
PQ3: It is easy to send digital information using the e-TrustEx platform.	4.50	Efficiency
	4.50	Security/Privacy (Trust)

Statement	Mean	Dimension
PQ4: I am confident that the digital information I transfer using e-TrustEx does not get lost.		Reliability
PQ5: I am confident that the digital information I transfer using e-TrustEx does not get corrupted.	4.50	Security/Privacy (Trust) Reliability
PQ11: I am satisfied with the e-TrustEx platform performance.	4.50	Efficiency
PQ16: I am satisfied with the on-boarding assistance offered by the e-TrustEx team.	4.50	Support
PQ7: E-TrustEx allows an effective tracking of the document status.	4.00	Efficiency
PQ8: On e-TrustEx, it is easy to retrieve any unread messages through a request.	4.00	Efficiency
PQ14: The Joinup support team treated my request in due time.	4.00	Support

*- The response rate is too low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

4.3.2 Utility

Table 10 presents an overview of the aspects that are strong, require attention or are weak of the e-TrustEx Platform in the context of Utility.

TABLE 10 - ACTION 1.8 UTILITY STRENGTHS AND WEAKNESSES

Statement	Mean	Dimension
U3: E-TrustEx accelerates digital information exchange with the European Administration.	5.00	Value for EU Value for cross-border and cross-sector interoperability
U4: E-TrustEx improves work performance, as it reduces paper work.	5.00	Value for EU
U10: The allowed message size meets my business needs.	5.00	Value for EU
U11: I would recommend the e-TrustEx solution.	5.00	Value for cross-border and cross-sector interoperability
U2: The e-TrustEx functionality is sufficient for effective digital information exchange.	4.67	Value for cross-border and cross-sector interoperability
U7: E-TrustEx is beneficial in terms of saving time and costs, as it is a reusable solution.	4.67	Value for cross-border and cross-sector interoperability
U12: I am satisfied with the communication offered by the e-TrustEx team.	4.67	Value for cross-border and cross-sector interoperability

Statement	Mean	Dimension
U1: The e-TrustEx web services are versatile by design, as it can be accessed via a web-based client interface, other application or web service.	4.50	Value for cross-border and cross-sector interoperability
U5: E-TrustEx improves the efficiency and effectiveness of the processes reducing errors and manual interventions.	4.50	Value for cross-border and cross-sector interoperability
U8: E-TrustEx increases the efficiency of business processes and their transparency.	4.50	Value for cross-border and cross-sector interoperability
U9: It is convenient to have an overview of the digital information received via e-TrustEx.	4.50	Value for EU
U6: E - TrustEx simplifies digital information exchange and eliminates the need for using postal or fax services.	3.67	Value for cross-border and cross-sector interoperability
		Value for EU

*- The response rate is too low for drawing meaningful statistical conclusions. Consequently, the analysis is for the informative purposes only.

5 CONCLUSIONS AND RECOMMENDATIONS

The objective of this survey was to evaluate the Perceived Quality and the Utility of Action 1.8 – e-TrustEx Platform’s functionality and content in the context of the pilots conducted with DGs. The following conclusions and recommendations relate directly to the conducted pilots and are subject to the small survey sample size. For this reason the recommendations and analysis are to be used for informative purposes only.

- **Perceived Quality:**
 - Overall, the users are satisfied with e-TrustEx Platform performance;
 - The results show that all pilot representatives consider the e-TrustEx Platform safe for sensitive digital information exchange, as it offers advanced security features;
 - The findings present that the e-TrustEx Platform helps users digitise their business processes;
 - The results show that 66% of users (2 out of 3) have contacted the e-TrustEx support team and remained satisfied with the on-boarding assistance offered by the e-TrustEx team;
 - All pilots respondents strongly agreed that the e-TrustEx support team resolved their issues, however not all fully agreed that their requests were treated in due time;
 - The findings present that the pilot representatives do not fully agree that it is easy to retrieve any unread messages through a request when using e-TrustEx.
- **Utility:**
 - The results show that e-TrustEx Platform is perceived as beneficial in terms of acceleration of digital information exchange with the European Administration. Additionally, e-TrustEx is beneficial in terms of saving time and costs and is recognized as a reusable solution;
 - The findings present that most of the users strongly agreed that e-TrustEx improves work performance, as it reduces paper work. However, they do not fully agree that e-TrustEx completely simplifies digital information exchange and eliminates the need for using postal or fax services. 1/3 of the users (1 out of 3) disagreed with this statement, which makes this the weakest aspect of the e-TrustEx platform.

Based on the conclusions drawn, CGI-ACN adduces the following recommendation:

- **Perceived Quality:**
 - The process of retrieving unread messages through a request in the e-trustEx Platform should be improved;
 - The e-TrustEx support team should improve the users request treatment process in order to solve the user requests in due time;
 - As suggested by e-TrustEx Platform users, the following improvements could be considered:
 - Possibility to pass the weekly transmission reports to the addressee generated by e-GREFFE via e-TrustEx;

- Transmission of notification messages to the addressee needs to be preserved since the new version of e-TrustEx on 21/04/2015. The messages could be deleted when the status 'read' is obtained;
 - Customisation of the notification text depending on the addressee (National Parliaments, Permanent Delegations, Mission, Tiers) and the finality of the act (entry into force, information, etc.).
- Utility:
 - Further investigation should be conducted on what type of information users send using postal or fax services, as well as their feedback and expectations regarding the simplicity/complexity of the e-TrustEx Platform. This would enable the identification of users' needs that might be taken into account for the future e-TrustEx Platform improvements.

6 APPENDIX

6.1 STATEMENT MAPPING TO DIMENSIONS

In order to measure the Perceived Quality and Utility of the Action 1.8 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 1.8 Perceived Quality.

TABLE 11 - ACTION 1.8 PERCEIVED QUALITY STATEMENT MAPPING TO DIMENSION

Statement	ID	Efficiency	Security/ Privacy (Trust)	Reliability	Support	Count of areas covered by question
The interface of the e-TrustEx GUI is user-friendly.	PQ1	✓				1
The documentation provided as guidance for the use of the e-TrustEx is clear and helpful.	PQ2	✓			✓	2
It is easy to send digital information using the e-TrustEx platform.	PQ3	✓				1
I am confident that the digital information I transfer using e-TrustEx does not get lost.	PQ4		✓	✓		2
I am confident that the digital information I transfer using e-TrustEx does not get corrupted.	PQ5		✓	✓		2
I consider e-TrustEx as a trustworthy platform for sensitive digital information exchange as it offers advanced security features.	PQ6		✓			1
e-TrustEx allows an effective tracking of the document status.	PQ7	✓				1
On e-TrustEx, it is easy to retrieve any unread messages through a request	PQ8	✓				1
The message filtering services offered by e-TrustEx for quick information research is helpful.	PQ9	✓				1
e-TrustEx helps digitizing my business processes	PQ10	✓				1
I'm satisfied with the e-TrustEx platform performance	PQ11	✓				1
It is easy to integrate with the e-TrustEx generic services	PQ12	✓				1
The e-TrustEx support team shows a sincere interest in solving user requests	PQ13				✓	1
The Joinup support team treated my request in due time.	PQ14				✓	1
The e-TrustEx support team resolved my issue.	PQ15				✓	1

Statement	ID	Efficiency	Security/ Privacy (Trust)	Reliability	Support	Count of areas covered by question
I'm satisfied with the on-boarding assistance offered by the e-TrustEx team.	PQ16				✓	1
# of questions covering dimension		9	3	2	5	
% of questions covering dimension		56%	19%	13%	31%	

Table 12 shows the statements mapping according to three dimensions of the Action 1.8 Utility.

TABLE 12 - ACTION 1.8 UTILITY STATEMENT MAPPING TO DIMENSION

Statement	ID	Value for EU	Value for EC	Value for cross- border and cross-sector interoperability	Count of areas covered by question
The e-TrustEx web services are versatile by design, as it can be accessed via a web-based client interface, other application or web service.	U1			✓	1
The e-TrustEx functionality is sufficient for effective digital information exchange.	U2			✓	1
e-TrustEx accelerates digital information exchange with the European Administration.	U3	✓		✓	2
e-TrustEx improves work performance, as it reduces paper work.	U4	✓			1
eTrustEx improves the efficiency and effectiveness of the processes reducing errors and manual interventions.	U5			✓	1
e-TrustEx simplifies digital information exchange and eliminates the need for using postal or fax services.	U6	✓		✓	2
e-TrustEx is beneficial in terms of saving time and costs, as it is a reusable solution.	U7			✓	1
e-TrustEx increases the efficiency of business processes and their transparency.	U8			✓	1
It is convenient to have an overview of the digital information received via e-TrustEx.	U9	✓			1
The allowed message size meets my business needs.	U10	✓			1
I would recommend the e-TrustEx solution.	U11			✓	1
I'm satisfied with the communication offered by the e-TrustEx team	U12			✓	1
# of questions covering dimension		5	0	9	
% of questions covering dimension		41%	0%	75%	

6.2 RAW DATA EXPORT

The attached file provides the survey result export.



Raw data.xls

6.3 GLOSSARY

- The mean⁷ (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 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;
- Standard deviation 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 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;
- ‘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 programme⁴;
- 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.