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Final evaluation of the ISA programme

Accompanying the document

**Report from the Commission to the European Parliament and Council on the results of
the final evaluation of the ISA programme**

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List of acronyms

Acronym	Description
ARE3NA	Reusable Inspire Reference Platform
ABB	Architectural Building Blocks
AD	Administrator function group
ADMS	Asset Description Metadata Schema
AST	Assistant function group
BOMOS	Governance, Maintenance and Development Model for Open Standards
BRIS	Business Registers Interconnection System
CAMSS	Common Assessment Method for Standards and Specifications
CarTool	Cartography Tool
CEF	Connecting Europe Facility (CEF)
CF	Cohesion Fund
CESAR	Community of European Semantic Asset Repositories
CESI	Common Information Sharing Environment
CIP	Competitiveness and Innovation FrameWork Programme
CIPA	Common Infrastructure for public administration Sustainability
CIRCABC	Communication and Information Resource Centre for Administrations, Businesses and Citizens
CISE	Common Information Sharing Environment
CPSV-AP	Core Public Service Vocabulary Application Profile
CTI	Comité Technique Informatique
DAE	Digital Agenda for Europe
DCAT-AP	Application Profile for data portals in Europe
DG	Directorate General
DG CNECT	Communications Networks, Content and Technology DG (ex DG INFSO)
DG ENTR	DG Enterprise and Industry
DG TAXUD	DG Taxation and Customs Union
DG DIGIT	Directorate-General for Informatics
DSI	Digital Service Infrastructure
DSM	Digital Single Market
DSS	Digital Signature Services
EAEC	European Atomic Energy Community
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
ECAS	European Commission Authentication Service
ECI	European Citizens' initiatives
ECAS	European Commission Authentication Service
ECLI	European Case Law Identifier

Acronym	Description
e-CODEX	e-Justice Communication via Online Data Exchange
e-Sens	Electronic Simple European Networked Services
e-TrustEX	Trusted Exchange Platform
EEC	European Economic Community
EEP	Energy-Europe Programme
EESSI	Electronic Exchange of Social Security Information
EFIR	European Federated Interoperability Repository
EIA	European Interoperability Architecture
EIF	European Interoperability Framework
EIS	European Interoperability Strategy
EIRA	European Interoperability Reference Architecture
ELI	European Legislation Identifier
EMFF	European Maritime & Fisheries Fund
EPC	European Professional Card
epSOS	European Patients - Smart Open Services
EQ	Evaluation question
ES	Earned Schedule
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF	European Structural and Investment Funds
EU	European Union
Eulf	European Union Location Network
EVM	Earned Value Management
FA	Focus Area
FP7	7th FrameWork Programme
GENIS	Generic and Interoperable Notification Services
GeoDCAT-AP	An extension of the DCAT-AP for geospatial data
HLCIT	High Level Committee on Information Technology
HMs	Horizontal Measures
HoU	Head of Unit
IA	Impact Assessment
ICT	Information and Communication Technology
ICT PSP	Information and Communication Technology Policy Support Programme
IDA	Interchange of Data between Administrations
IDABC	Interoperable Delivery of Pan-European eGovernment services to public administrations, Business and Citizens
IMI	Internal Market Information
IMM	Interoperability Maturity Model
INSPIRE	Infrastructure for Spatial Information for Europe Directive

Acronym	Description
IPM	Interactive Policy Making
IRM	Information resource Manager
IS	Information Systems
ISA	Interoperability Solutions for European public administrations
ISA²	Interoperability solutions for European public administrations, businesses and citizens
ISA Committee	Committee on Interoperability Solutions for European public administrations
ISA staff	HR of the ISA unit
ISA unit	DG DIGIT Unit B.6
ISPMB	Information Systems Project Management Board
LEOS	Legislation Editing Open Software
LSPs	Large Scale Pilots
MARKT	Internal Market and Services
M&E	Monitoring & Evaluation
MFF	Multi-annual Financial Framework
MT@EC	Machine Translation Service by the European Commission
NIF	National Interoperability Framework
NIFO	National Interoperability Framework Observatory
NIS	National Interoperability Strategy
NoE	Network of Excellence
OCS	Online Collection Software
ODR	Online Dispute Resolution
OSOR	Open Observatory and Repository
OSS	Open Source Software
PCIs	Projects of Common Interest
PEPPOL	Pan-European Public Procurement OnLine
PKI	Public Key Infrastructures
PSC	Point of Single Contact
PSI	Public Sector Information
PV	Planned Value
SEPD	Single European Procurement Domain
SEMIC	Semantic Interoperability Centre Europe
SD-DSS	Digital Signature Services software
SMT	Statistical Machine Translation
SNE	Seconded National Expert
SPOCS	Simple Procedures Online for Cross-border Services
sTESTA	Data Communication Network Service
STORK	Secure idenTity acrOss boRders LinKed
SV	Schedule Variance
TCO	Total Cost of Ownership

Acronym	Description
TES	Trans-European Services
TESTA	Trans-European Services for Telematics between Administrations
TESTA NG	Trans-European Services for Telematics between Administrations New Generation
TOR	Terms Of Reference
TL Manager	Trusted Lists management software
WP	Work Programme
YE	Your Europe

Executive summary

1. Context & evaluation objectives

The legal decision on 'Interoperability Solutions for Public Administrations', which led to the creation of the ISA programme, was adopted by the European Parliament and the Council on 16 September 2009¹ with a budget of €164,100,000 for its implementation from 1 January 2010 to 31 December 2015.

Building on the advances made by its predecessor IDA and IDABC programmes, the ISA programme was established against the background of major EU policies, to which it needed to be aligned. These included the **Europe 2020 Strategy**², developed as a response to the financial and economic crisis, the **Digital Agenda for Europe**, one of the seven flagship initiatives of the Europe 2020 Strategy and the **eGovernment Action Plan 2011-2015**, which aimed to achieve a new vision of European public administrations through a more open model of design, production and delivery of online services to deliver greater value to citizens with fewer resources. Although other major policies have been launched since the inception of the ISA programme, notably the **Connecting Europe Facility** (CEF) and the **Digital Single Market** (DSM) strategy, the final evaluation finds that it is well aligned with both.

As stipulated under Article 1(2) of the legal decision, the programme aims *'to support cooperation between European public administrations'* with a view to enable *'the delivery of electronic public services supporting the implementation of Community policies and activities including bodies performing public functions on their behalf'* by *'facilitating the efficient and effective electronic cross-border and cross-sectoral interaction between such administrations'*. To achieve such objectives, the programme has been implemented by means of actions, i.e. studies and projects, as well as by accompanying measures to support the:

- Creation and improvement of **common frameworks** in support of interoperability across borders and sectors;
- Improvement of existing **reusable generic tools** as well as the establishment of new ones;
- Operation and improvement of existing **common services** as well the establishment of new ones; and
- **Assessment of ICT implications** of proposed or adopted Community legislation.

¹ Decision N° 922/2009/EC of the European Parliament and of the Council of 16 September 2009 on interoperability solutions for European public administrations (ISA), O.J. L260/20-27, 03.10.2009, Brussels.

² The Europe 2020 strategy focused on delivering growth that is: smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a low-carbon economy; and inclusive, with a strong emphasis on job creation and poverty reduction. The strategy had five goals in the areas of employment, innovation, education, poverty reduction and climate/energy.

Currently, 38 actions are being implemented under the **ISA Work Programme (2015)** and are aligned with the clusters defined in the EIS; Trusted information exchange, Interoperability architecture and Assessment of ICT implications of EU legislation. 12 of these actions correspond to common frameworks, 8 to common services and 13 to generic tools. One action corresponds to the assessment of ICT implications of EU legislation and the remaining four actions concern accompanying measures and monitoring of the ISA programme.

The European Commission contracted KURT SALMON and KPMG to conduct an independent, external final evaluation of the ISA programme³, based on Article 13(3) of the legal decision with the four main objectives:

- **Objective 1:** Evaluate the implementation of the ISA programme from its commencement in January 2010 until the time that this evaluation takes place.
- **Objective 2:** Assess the relevance, effectiveness, efficiency, utility, sustainability, coherence and coordination of the ISA actions as well as assess performance, qualitatively and quantitatively, when possible, against its objectives and rolling Work Programme.
- **Objective 3:** Examine the benefits of the ISA actions to the EU for the advancement of common policies.
- **Objective 4:** Identify areas for potential improvement and verify synergies with other EU initiatives⁴ in the area of cross-border and cross-sectoral interoperability as well as sharing and reuse.

2. Methodology

In order to satisfy the objectives of this final evaluation, data was collected using a bespoke methodology comprising of several techniques and quantitative and qualitative analysis. The final evaluation's methodology⁵ conforms to the methodological guidance for evaluations provided by DG Budget⁶ and adheres to developments in the Smart Regulation policy⁷. During the **data collection phase**, the evaluation team used a combination of **desk research, surveys (73⁸), phone or face-to-face interviews (37)** and also **case studies of specific actions** of the Work Programme (2) in order to fulfil the objectives of this evaluation. Furthermore, **written requests were addressed to specific stakeholders** to gather additional information on specific sub-issues of the final evaluation.

³ ISA Programme.

⁴ For instance in the context of the DAE such as, but not exclusively, the European eGovernment Action Plan, Connecting Europe Facility, and Building Institutional Capacity.

⁵ More detailed information of the methodology is available in Chapter 2 of the Final Report and in the Annex.

⁶ European Commission, Evaluating EU Activities: A practical guide for the Commission Services, Office for Official Publications of the European Communities, Luxembourg, 2004.

⁷ European Commission, Public consultation on Commission Guidelines for Evaluation, DG SG, Brussels, 2013.

⁸ In total, 73 stakeholders expressed their opinions as a result of 5 launched surveys.

3. Findings and results

3.1. Relevance

The ISA programme's objective 'to support cooperation between European public administrations by facilitating the efficient and effective electronic cross-border and cross sectoral interaction between such administrations' is still pertinent to meet evolving needs at both national and EU levels. The ISA programme facilitates interaction between European public administrations. The modified scope of the follow-on ISA² programme will, most likely, enhance this objective. The follow-on ISA² programme's scope aims to facilitate electronic cross-border or cross-sector interaction between European public administrations, businesses and citizens as well as between European public administrations (Conclusion N° 1).

The needs of European public administrations, identified at the time of the ex-ante and interim evaluations of the ISA programme, are still considered as the current needs of European public administrations. In particular, the need to have ISA solutions more reused as well as the need for an increased collaboration between the programme and both the Member States and Commission services are as valid now as they were at the time of the interim evaluation. The evaluation notes that, as a voluntary policy, the ISA programme has no capacity to guarantee greater reuse of its solutions and increased collaboration depends on the willingness of all stakeholders (Conclusion N° 2).

The programme has already started to take into account new evolving needs of European public administrations on governance and coordination, primarily through the revision of the EIS and through enhanced internal coordination within the European Commission. Finally, **the ISA programme's objectives are well aligned with the Digital Agenda for Europe, the European eGovernment Action Plan 2011-2015, the Connecting Europe Facility and the recently launched Digital Single Market Strategy** (Conclusion N° 3).

3.2. Efficiency

The ISA programme can be considered as efficient, overall. First of all, the evidence from action 5.01 Monitoring & Evaluation found that the programme has been considered on track during the entire period from 2010 to 2015 with an average delay of less than 5%. In addition, 90% of surveyed Member States' representatives and EC officials affirmed their view that the programme has delivered on time and within its original scope. Furthermore, a majority of these stakeholders (68% of Member States' representatives and 58% of EC officials) felt fully or somewhat involved in the annual revisions of the ISA programme (Conclusion N° 4).

The evaluation found that the selection procedure of proposals for new actions and the funds release process can be regarded as efficient. Moreover, the total executed budget for the 2010 – 2014 Work Programmes is equal to EUR 128.2m, only slightly exceeding its planned budget of EUR 127.4m by less than 1 per cent (0.63%), yet still within the overall financial envelope. Given these budgetary findings, **the evaluation confirms the programme has been efficient in this regard.** The same can be concluded for the allocation of human resources, even though the actual allocation was always lower than what was foreseen in the ISA legislative proposal.(Conclusion N° 5).

3.3. Effectiveness

The ISA programme has delivered operational solutions, i.e. common frameworks, reusable generic tools and common services, contributing to the achievement of the programme's objective to facilitate effective collaboration between European public administrations. Member States' representatives and EC officials affirmed their view that the programme contributes more to the establishment of new common frameworks, common services and reusable generic tools than in improving existing ones. **Overall, more interviewees and online survey respondents believed that all the ISA solutions facilitate interoperability between European public administrations (41%) than did not (30%). The remaining respondents said that they did not have sufficient overview of the programme to comment on all solutions.** The evaluation found, nevertheless, that the need for the further development of the EUSurvey tool in the ISA² programme has to be appraised given respondents' specific feedback on this (Conclusion N° 6).

The evidence from the evaluation confirms that the programme contributed to sharing and reuse, through the establishment of common frameworks. The programme also contributed to organisational and legal interoperability, although the results from the ISA actions are scattered in this regard, which indicate space for improvement. Now that the assessment of ICT implications of new EU legislation has been included in the Impact Assessment process (Better Regulation Guidelines), the ISA programme has a defined role to promote this exercise and support the DGs and services undertaking these assessments with guidance as part of this internal EC process (Conclusion N° 7).

3.4. Utility

The evaluation concludes that, overall, the achieved and anticipated results and impacts of the ISA programme largely address the business needs that they intended to. Some ISA actions have led to the production of 23 solutions. Of these 23 solutions, 15 are used by up to all Member States; 14 are used by several Commission services, and 5 are used by a handful of other EU institutions. Nevertheless, other actions have also produced results if not specifically related to solutions. For example, action 3.01 Assessment of ICT implications of new EU legislation has

achieved its main objective as it has succeeded in being included in the formal Impact Assessment process even though there were not so many assessments conducted during the ISA programme.

Member States' representatives and EC officials considered the top three benefits delivered by the ISA programme to Member States to be the use of ISA solutions, the existence of the programme itself (to raise awareness about the importance of interoperability and to keep it on the political agenda) and the provision of references, such as the EIF, supported by action 4.2.03 NIFO, networks and solutions, such as action 2.04 sTESTA and action 2.06 CIRCABC. In addition, the evaluation concludes that the ISA programme contributes to the modernisation of the public sector in Europe. **The evaluation notes that the ISA programme does not coordinate, in a systematic way, with Commission DGs and services that run sectoral programmes**, within which many cross-sector and/or cross-border services are managed and to which interoperability could greatly contribute (Conclusion N° 8).

The evaluation confirms the existence of low levels of awareness about the programme among its interviewed and surveyed key stakeholders, Member States' representatives and EC officials. Paradoxically, the additional measures, as suggested by the same interviewees and survey respondents, **are all either in place or being developed or expanded**. The evaluation, therefore, concludes that the follow-on ISA² programme should raise awareness about these existing measures and improve them by adapting them to the needs of targeted/specific stakeholders (Conclusion N° 9).

3.5. Sustainability

The evaluation found that the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, is ensured. From a technical and operational standpoint, the annual ISA Work Programme summarises the actions that are funded based on numerous criteria, such as the technical need for an action to deliver a solution and the operational role that it fulfils. From a financial standpoint, sustainability of the developed solutions will be guaranteed, primarily, by the follow-on ISA² programme, although not after that. However, this may change subject to an impact assessment or other policy options, which may be pursued, during the period of the follow-on ISA² programme. Some solutions, created by the ISA programme, are now funded, operationally sustained and further developed outside of the framework of the programme by other EU initiatives and programmes.

To address the long term sustainability of the solutions, the ISA² programme should explore how to financially re-engineer certain services, which it provides, to ensure that users pay for them. In addition, the importance of focusing on the longer term organisational sustainability of ISA actions cannot be underestimated. Beneficiaries should formalise governance of services supported by these ISA actions to ensure their continuity.

The actual use and benefits of the solutions as well as the numbers of users of each ISA solution, which are not currently tracked in a systematic way, **should be measured by the programme**, to help identify options to ensure their sustainability outside of the programme's framework or without its funding (Conclusion N° 10).

3.6. Coherence

The evaluation found that a holistic approach within the framework the ISA programme does exist, even if the programme does not convey this sufficiently. This holistic approach is based on the strategic approach of the ISA programme, created in January 2013, including the mapping of the ISA actions to the various cycles (Inception, Execution, and Operation), the interrelation between the various actions, as well as its global approach as contributor to interoperability in Europe. The evaluation found that the ISA programme houses independent actions, with which stakeholders are often more familiar than the programme itself. Levels of awareness about programme's synergies are also confirmed to be lacking among the interviewees and survey respondents. In the context of the low levels of awareness, there is a need to provide greater clarity on the documented process about the selection of proposals for new actions (Conclusion N° 11).

Although a considerable amount of synergies exists between the programme's actions and other EU activities, and that synergies were achieved between programme actions quite well and other EU activities fairly well, the evaluation concludes that further synergies could have been achieved. The analysis showed that 25 ISA actions have more than five links with other ISA actions; including six ISA actions that are linked to more than ten other ISA actions. 24 actions have between one to five links with other actions. Given the ISA programme's holistic approach, it is normal that some actions have more synergies with other actions, which does not reduce the value of the latter actions. The analysis showed that the ISA programme has achieved synergies with several activities at EU level, including CEF.

The ongoing efforts of the ISA programme and DG DIGIT to work with relevant DGs to increase the EC's coherence on interoperability and eGovernment services, through enhanced coordination are satisfactory, for example, in the following separate activities; in the Inter-service Group on Public Administration Quality and Innovation and in its publications, such as the NIFO and eGovernment factsheets (Conclusion N° 12).

3.7. Coordination

The ISA programme coordinates formal activities well between the Member States, including the ISA Committee (Conclusion N° 13); **as well as with EC officials** (Conclusion N° 14) **to ensure their engagement in the programme.** Two-thirds of Member States' representatives and just over half of EC officials fully or somewhat agreed that the interaction between ISA and its stakeholders

was effective to ensure consistent exchange of information, views and best practices. In addition, the ISA programme coordinates activities well with stakeholders outside of the context of European public administrations during the course of its activities to ensure their engagement in the programme; when appropriate (Conclusion N° 15).

In fact, the evaluation found that the increase in coordination with stakeholders since the interim evaluation has been a major success of the ISA programme although potential to build on this success with more targeted efforts does exist. Between 2010 and 2015, approximately two thirds of all events, which the ISA programme organised and held with Member States' representatives, and 63% (25) of the 40 events organised by Member States, in which the ISA programme participated, were held since 2013, i.e. after the interim evaluation. With regard to Member States, the evaluation concluded that there is scope for individual national representatives on the ISA Committee, Coordination Group & Working Group to coordinate better with their own national colleagues on interoperability issues to better realise the programme's achievements.

The ISA programme increased its presence at conferences and other events run by the EC, having been involved in over 60 events since its inception, with three-quarters of these events taking place since the interim evaluation. This is a clear indication of the focus of the ISA programme to increase interaction with its stakeholders and their increasing interest in the programme.

A majority of the Member States' representatives and EC officials fully or somewhat agreed that the electronic platforms (i.e. Joinup, the ISA website and dashboard), used by ISA to deliver consistent interaction between stakeholders and with the European Commission, were adequate. However, there was a disappointing lack of knowledge among the stakeholders about the results achieved at national and EU level, i.e. about the reuse of the ISA programme at national level, as well as about the use of ISA results by DGs.

4. Recommendations

4.1. Recommendation 1

The ISA² programme, which serves an EU policy, should continue to align itself with other relevant EU policies (Conclusions N° 1, 2 & 3). It should also reflect the current needs of stakeholders to have more emphasis on having solutions operational and ready-for-use (Conclusion N° 6).

4.2. Recommendation 2

The ISA² programme should support the review of the EIS on interoperability and to ensure its success. The alignment between the programme and the future strategy should be monitored regularly, as recommended in the EIS implementation review 2012 (Conclusion N° 11).

4.3. Recommendation 3

The ISA² programme should continue to focus on the current ISA activities but place more emphasis on achieving legal and organisational interoperability. Now that the assessment of ICT implications of new EU legislation has been included in the Impact Assessment process (Better Regulation Guidelines), the ISA² programme should exploit its defined role to promote this exercise and support the DGs and services undertaking these assessments with guidance as part of this internal EC process (Conclusion N° 7).

4.4. Recommendation 4

The ISA² programme should update and implement its communication strategy for the follow-on programme, with a focus on targeted engagement, including sector-specific stakeholders, by building on its substantial efforts since the interim evaluation. This would address the lingering gap between the actual performance of the programme and the stakeholders' perception of it. This should be supported by the new Inter-service Group on Public Administration Quality and Innovation as the basis for improving the adoption of operational ready-for-use solutions (Conclusions 9, 13 – 15).

4.5. Recommendation 5

The ISA² programme should develop a more systematic business-case approach based on the Monitoring & Evaluation reporting, and the study on the cost-benefits of interoperability, both of which are ongoing. A clear business-case approach that satisfies defined eligibility criteria, as is likely to be the case in the ISA² programme based on its legislative proposal, would provide such an approach and clear guidance for stakeholders (Conclusions 5, 8 & 10).

4.6. Recommendation 6

DIGIT should, within its means and insofar as is possible, respect the targets of the follow-on programme's envisaged staff levels (Conclusion 5).

4.7. Recommendation 7

DIGIT should build on the improvements in the coordination of activities related to interoperability and eGovernment across the Commission that it has achieved since the interim evaluation (Conclusion N° 12).

4.8. Recommendation 8

The ISA unit should document the existing services and tools established or improved by the ISA programme (Conclusion N°6) within the European Interoperability Cartography (EUCart) and Joinup, by applying the principles and guidelines from the European Interoperability Reference Architecture (EIRA). This would allow the programme to further clarify its benefits and its increasing levels of interaction with stakeholders (Conclusion N° 13 – 15).

4.9. Recommendation 9

The ISA unit should develop a more systematic approach to support and monitor the use of common services and generic tools, but also the application and implementation of common frameworks (Conclusion N° 6).

Introduction

Kurt Salmon and KPMG, as part of the KonSult consortium, were mandated by the European Commission to conduct the final evaluation of the Interoperability Solutions for European public administrations (ISA) programme. This is based on Article 13(3) of the Decision No 922/2009/EC⁹, which states that ‘the ISA programme shall be subject to an interim evaluation¹⁰ and a final evaluation, the results of which shall be communicated to the European Parliament and the Council by 31 December 2012 and 31 December 2015 respectively’.

As stated in the same Article 13(3), the final evaluation aims to ‘examine issues such as the relevance, effectiveness, efficiency, utility, sustainability and coherence of the ISA programme’s actions’ and to ‘assess performance against the objective of the ISA programme and the rolling Work Programme’. The final evaluation should also specifically ‘examine the extent to which the programme has achieved its objective’.

In addition to the six aforementioned issues required by the legal decision, coordination is also considered as an additional issue, also called evaluation criteria, to be examined by the final evaluation. In fact, the evaluation should also, as stated in Article 13 (3) of the ISA legal decision, analyse the ‘benefits of the actions to the EU for the advancement of common policies, identify areas for potential improvement and verify synergies with other EU initiatives in the area of cross-border and cross-sectoral interoperability’.

In accordance with these seven evaluation criteria, Table 1 presents the main evaluation questions driving this evaluation.

Table 1 Evaluation questions related to the ISA programme’s performance

EQ Nr	Criteria	Evaluation question
EQ1	Relevance	To what extent were the ISA programme’s objective(s) pertinent to meet evolving needs and priorities at both national and EU levels?
EQ2	Efficiency	How economically were the various inputs converted into outputs?
EQ3	Efficiency	Which aspects of the programme were the most efficient or inefficient, especially in terms of resources mobilised?
EQ4	Effectiveness	To what extent did the ISA programme’s results and impacts achieve its objectives?
EQ5	Effectiveness	Are there aspects that were more or less effective than others, and, if so, what lessons can be drawn from this?
EQ6	Utility	How did the ISA programme’s achieved and anticipated results and impacts compare with the business needs they intended to address?
EQ7	Utility	Which measures could be taken to improve the utility of the next programme’s actions?

⁹ 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) (Decision located in OJ L 260, 3.10.2009, p.20).

¹⁰ COM (2013) 5 - Interim evaluation of the ISA programme, Brussels, 18.01.2013.

EQ Nr	Criteria	Evaluation question
EQ8	Sustainability	To what extent is the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, ensured?
EQ9	Coherence	To what extent did the ISA actions form part of a 'holistic' approach within the framework of the programme?
EQ10	Coherence	How well were synergies achieved between programme actions and with other EU activities?
EQ11	Coordination	To what extent did coordination of activities between Member States, including the ISA Committee, exist to ensure stakeholders' engagement in the ISA programme?
EQ12	Coordination	To which extent were activities coordinated or aligned with the needs of other stakeholders with whom the Commission was supposed to interact in the framework of ISA?

In order to monitor the progress of the final evaluation, a Steering Committee was specifically appointed. It is composed of the following members:

- Ms Margarida Abecasis, European Commission, DG DIGIT B.6;
- Mr Ioannis Sagias, European Commission, DG DIGIT B.6;
- Mr Konstantinos Bovalis, European Commission, DG DIGIT B6;
- Mr Hans Vanderbeke, European Commission, DG DIGIT B6;
- Mr François Kodeck, European Commission, Former SG – IT Governance task force;
- Mr Paul-Hervé Theunissen, European Commission, DG TAXUD A5;
- Ms Natalia Aristimuno Perez, European Commission, DG DIGIT B2;
- Ms Kate Anderson, European Commission, DG GROW B1; and
- Mr Michel Millot, European Commission, DG JRC H6.

This report has been structured in the following manner:

- Chapter 1 is an introduction that provides insights on the background and objectives of the ISA programme as well as its governance and Work Programme;
- Chapter 2 contains a presentation of the methodological framework for the evaluation;
- Chapter 3 discusses in detail findings and presents the related conclusions for each evaluation criteria;
- Chapter 4 Assesses the extent to which the recommendations from previous evaluations have been taken into account and includes, based on conclusions presented in Chapter 3, practical recommendations for the future.

Annexes referred to in this report, which contain more detailed evaluation findings, are available in a separate document called 'Final report – Annexes'.

1 Context

This chapter presents the background as well as the objectives of the ISA programme, respectively in sections 1.1 and 1.2. The ISA programme governance is described in section 1.3 whereas section 1.4 provides insights on its Work Programme.

1.1 Background of the ISA programme

In 1995, the Interchange of Data between Administrations (IDA) programme was established to promote the development and operation of trans-European telematic networks for data interchange between Member State administrations and/or EU institutions. It ran from 1995 to 1999.

Following the first IDA programme, its successor programme, IDA II, was launched in 1999 and operated until the end of 2004. This programme differentiated from its predecessor by being more directed towards the market and interoperability, with the aim of increasing the efficiency of the delivery of eGovernment services to European businesses and citizens.

Decision No 2004/387/EC of the European Parliament and of the Council, adopted on 21 April 2004, concluded negotiations on the Interoperable Delivery of Pan-European eGovernment Services to public administrations, Business and Citizens (IDABC) programme, which succeeded to IDA II and entered into force on 1 January 2005.

The ISA programme aimed to build on the experience gained from the IDABC, IDA II and IDA programmes, which made important contributions to ensure interoperability to support the electronic exchange of information between European public administrations.

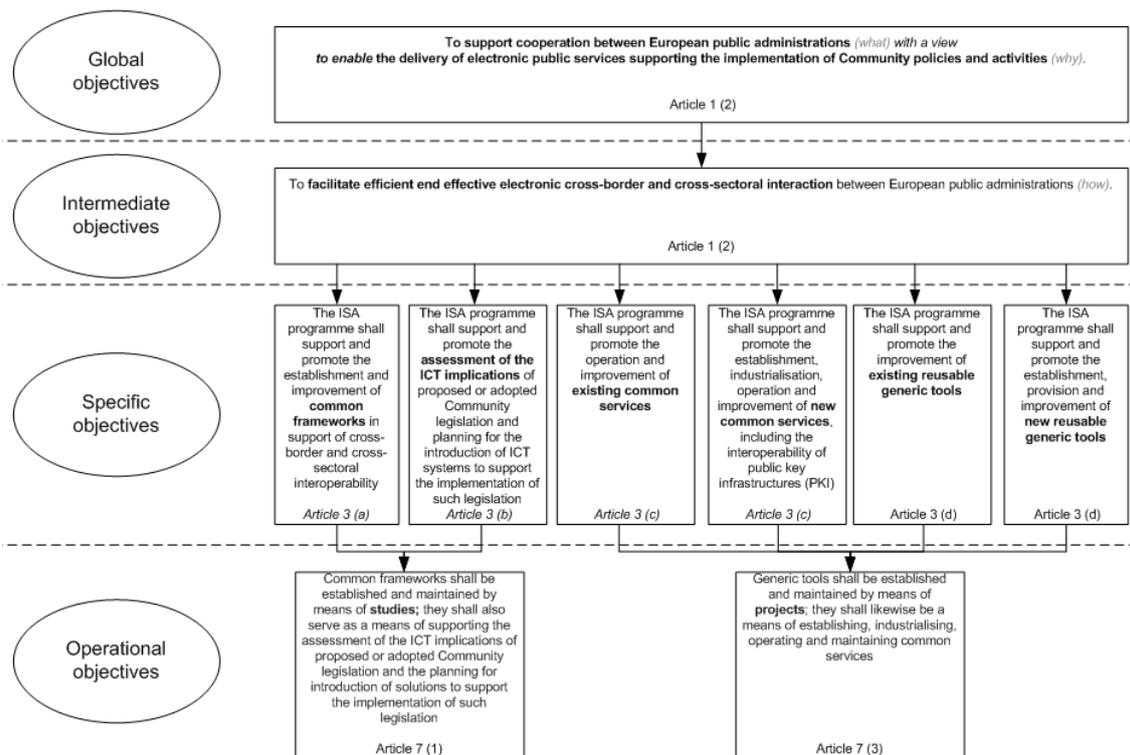
As mentioned in Article 17(1) of the ISA programme's legal decision, 'the financial envelope for the implementation [...] for the period from 1 January 2010 to 31 December 2015 shall be EUR 164,100,000, of which EUR 103,500,000 is for the period from 1 January 2010 until 31 December 2013. For the period following 31 December 2013, the amount shall be deemed to be confirmed if it is consistent for this phase with the financial framework in force for the period commencing in 2014.'

As further detailed in section 1.4, the ISA programme is based on a rolling Work Programme that has to be revised and approved by the Commission at least once a year (cf. Article 9(2) of the legal decision).

1.2 Objectives of the ISA programme

The hierarchy of objectives is the first step to design the different elements of the intervention logic. The identification of these objectives is indispensable for assessing, primarily, the relevance, effectiveness and utility of the programme. As defined in the framework of the interim evaluation, Figure 1 depicts the hierarchy of objectives of the programme.

Figure 1 Hierarchy of objectives of the ISA programme



Source: 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) (Decision located in OJ L 260, 3.10.2009, p.20).

Global objectives provide a basis for assessing the ISA programme in relation to the longer term effects (global impacts).

As stipulated under Article 1(2) of the Decision N°922/2009/EC, the objective of the ISA programme is to ‘support cooperation between European public administrations by facilitating the efficient and effective electronic cross-border and cross-sectoral 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.’

With reference to Article 1(1) and Article 1(2), European public administrations are defined as local and regional administrations and EU institutions (formerly called Community institutions) and bodies, including bodies performing public functions on their behalf. This definition applies to the remaining parts of this document.

As defined in the framework of the interim evaluation of the ISA programme, the global objective of the ISA programme can be expressed as 'to support cooperation between European public administrations, with a view to enable the delivery of electronic public services supporting the implementation of Community policies and activities.'

Intermediate objectives provide a basis for assessing the ISA programme in relation to the medium term effects regarding both direct (public administrations) and indirect beneficiaries (citizens and enterprises). They are used as the means of attaining the global objective of the ISA programme.

The evaluation considers the following statement, 'to facilitate the efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations', as the intermediate objective. This is fully in line with the legal decision and with the definition agreed at the time of the interim evaluation.

Specific objectives provide a basis for assessing the ISA programme in relation to its short term results for the direct beneficiaries. These objectives are equivalent to the deliverables of the ISA actions.

With reference to Article 3 of the legal decision, the ISA programme specific objectives could indeed be grouped into four broad categories, according to the different activities that the ISA programme shall support and promote:

- Common frameworks;
- Existing and new Common services;
- Existing and new reusable Generic tools;
- Assessment of ICT implications.

Indeed, the global and intermediate objectives of the ISA programme are realised through six specific objectives, which are constructed based on the above mentioned categories and correspond to the direct effects of the actions.

Operational objectives are related to the ISA programme actions aimed at operating the Work Programme. This relates primarily to the resources allocated, i.e. budget and human resources, which are required to accomplish the actions. With reference to Article 4, this is related to the objectives of the actions, which are specified in the Work Programme entries.

1.3 ISA programme governance

The European Commission's Directorate General for Informatics (DIGIT) is responsible for coordinating the implementation of the ISA programme.

As stated in Article 12 of the ISA legal decision, 'the Commission should be assisted by the Committee on Interoperability Solutions for European public administrations (the ISA Committee)'.

Indeed, DIGIT is assisted by a management Committee (ISA Committee), composed of representatives of each EU Member State that participate in the programme.

Article 4 and Article 7 of Decision 1999/468/EC ['Comitology decision' of 28 June 1999] are used to regulate the role of the ISA Committee and the procedure to be followed.

Regulation (EU) No 182/2011¹¹ (new comitology Regulation) was adopted on 16 February 2011. It repeals Decision 1999/468/EC (the old 'Comitology Decision').

There are now two comitology procedures - the advisory procedure and the examination procedure. The examination procedure replaces the management and regulatory procedures. The examination Committee can approve or reject the implementing measure with qualified majority (the same voting rules as those that apply in the Council).

In case no decision is taken, depending on the subject matter of the implementing measure, the Commission can either adopt the measure or submit it to an appeal Committee, where a new final voting takes place. Figure 2 illustrates the current governance structure of the ISA programme.

¹¹ Regulation No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers - (Regulation located in OJ L 55, 28.02.2011, p.13).

Figure 2 ISA Governance



Source: Regulation No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers - (Regulation located in OJ L 55, 28.02.2011, p.13).

The roles and responsibilities of the various stakeholders involved in the management and delivery of the ISA programme can be summarised as follows.

The ISA Committee is composed of representatives of Member States. Its role is to assist the Commission in the implementation of the ISA programme by delivering opinions on and amendments to the Commission's proposals. Therefore, the ISA Committee enables the supervision of the Commission's executive power. In addition, the Commission's draft implementing acts are discussed and debated during the ISA Committee meetings.

In accordance with Article 15 of the Decision No 922/2009/EC, 'the ISA programme shall be open to participation, within the framework of their respective agreements with the Community¹², by the countries of the European Economic Area and the candidate countries'. Representatives of third parties, as well as experts, can also attend the Committee meetings but cannot be present at or participate in the vote.

According to the Article 7 of the Decision 1999/468/EC (old 'Comitology decision'), 'each Committee shall adopt its own Rules of Procedure'.

In that regard, in order to ensure continuity and consistency at working level, the ISA Committee created the ISA Coordination Group.

¹² The Community refers to the 28 Member States of the European Union.

The ISA Coordination Group, established by the adoption of the Terms of Reference of the ISA Coordination Group, is composed of high level experts, appointed by the ISA Committee and sometimes members of the ISA Committee itself. Its role is to apply the European Interoperability Strategy (EIS¹³) and its related priorities into concrete actions for the ISA Work Programme, based on the expertise of the Member States, so that the ISA Work Programme actions are coordinated and aligned with the initiatives at national level. Indeed, the ISA Coordination Group ensures consistency in Member States' contributions across the ISA Work Programme's actions and specialists groups¹⁴.

The ISA Coordination Group reports to the ISA Committee on a regular basis, more specifically upstream to the ISA Committee meetings, in order to prepare their discussions.

At the suggestion of the ISA Coordination Group, the ISA Committee can appoint the ISA Working Group Members in order to delegate work on specific scopes to experts.

According to the Terms of Reference of the ISA Working Group, the role of the Working Groups is 'to assist the Commission in implementing concrete actions of the ISA Work Programme and possibly other EU initiatives', while facilitating the cooperation between the Commission and the Member States at the same time.

Thus, they can contribute to ISA actions in different ways: 'by national information gathering, by providing input to, reviewing and commenting on draft documents and deliverables, by communicating and explaining ISA results, by contributing to the identification of relevant stakeholders and by informing Working Group members about national interoperability initiatives'.

Each Working Group is established on the basis of a call for nominations; as a matter of fact, they may include members of the ISA Committee. In addition, the members of the Working Group can also include representatives of other DGs, aside from DG DIGIT, and the appointed Member States high level experts.

Four Working Groups have been established within the ISA programme. Three of them follow the EIS clusters, namely one on Trusted Information Exchange, one on Interoperability Architecture and a last one on Exchange of Best Practices. These three groups were established in 2010 following the adoption of the ISA programme. They include stakeholders from different Member States as well as DG DIGIT officials and occasionally have representatives from the JRC or DG CNECT.

¹³ Annex I to the Communication Towards interoperability for European public services.

¹⁴ 'Specialists groups' refers to 'the ISA Working Groups'.

The fourth one was established more recently - in 2013, in the context of the ISA actions 1.17 Reusable Inspire Reference Platform and action 2.13 Development of a European Union Location Framework. It is an ISA-INSPIRE Working Group on Spatial Information and Services. The reason for establishing it was the importance of interoperability of geospatial information. Creation of such group aimed to facilitate the dialogue between the geospatial and e-government communities in general; and particularly between the INSPIRE and ISA communities. Its members are a mix of INSPIRE and eGovernment representatives. European Commission's stakeholders include representatives from DG CNECT, DG DIGIT, DG Environment and the JRC.

Each ISA Working Group addresses specific issues and, consequently, prepares the work of the ISA Coordination Group. In addition, members of the ISA Working Groups are meant to report nationally to the ISA Coordination Group members.

1.4 ISA Work Programme

Article 9 of the ISA legal decision requires that the Commission establishes a rolling Work Programme for the implementation of the ISA programme for its full duration. The Commission must approve, at least once a year, any modifications of the ISA Work Programme, adopted for the first time by the Commission in July 2010. Amendments can be related either to minor or to significant changes of existing ISA actions¹⁵ or to proposals for new ISA actions. Five revisions of the rolling Work Programme have occurred to date.

Its main goal is to define the actions which will be implemented throughout the year. The 'ISA actions' can be of different kinds; namely studies, projects and accompanying measures. The policy context of those actions corresponds to the vision and goals outlined in the European Interoperability Strategy (EIS)¹⁶ and the European Interoperability Framework (EIF)¹⁷.

The programme's budget finances a series of ISA actions aimed at establishing or operating three different types of solutions, but also assessing the ICT implications (with reference to Art. 3(b)) of proposed or adopted EU legislation and planning for the introduction of ICT systems to support the implementation of such legislation.

With reference to the ISA legal decision:

- Article 2(b): 'Solutions means common frameworks, common services and generic tools';
- Article 2(c): 'Common Framework means strategies, specifications, methodologies, guidelines and similar approaches and documents';
- Article 2(d): 'Common Services means operational applications and infrastructures of a generic nature which meet common user requirements on policy areas';
- Article 2(e): 'Generic tools means reference platforms, shared and collaborative platforms, common components and similar building blocks which meet common user requirements across policy areas'.

As of today, 38¹⁸ actions are being implemented under the ISA Work Programme (2015)¹⁹, out of which 12 correspond to common frameworks, 8 to common services, 13 to generic tools and 1 to the assessment of ICT implications of EU legislation. The rest of the ISA actions (4 actions) refer to 'Accompanying measures' (Article 2(g): 'Accompanying measures means strategic and awareness-raising measures, measures in support of the management of the ISA programme

¹⁵ A change is classified as minor, when it implies less than EUR 0.5m changes in budgets.

¹⁶ Annex I to the Communication Towards interoperability for European public services.

¹⁷ Annex II to the Communication Towards interoperability for European public services.

¹⁸ The funding of 13 actions has already been concluded.

¹⁹ See the following link to access the ISA Work Programme fifth revision 2015: http://ec.europa.eu/isa/documents/isa-work-programme/isa-work-programme-2015-detailed-description-of-the-actions_en.pdf.

and measures in relation of the sharing of experience and the exchange and promotion of good practices'), 'Awareness' and 'Monitoring' of the ISA programme.

The design of the actions is based on proposals made on an annual basis by the Commission services and Member States through the ISA Committee. Actions relevant to specific policy areas are designed in close coordination with the Commission service(s) responsible for the policy area.

The ISA programme is articulated around the following three clusters:

1. Trusted information exchange;
2. Interoperability architecture; and
3. Assessment of ICT implications of EU legislation.

A tabular overview of the actions is proposed in Table 2 and includes the action number, the type of action (i.e. study, project or accompanying measure), the type of activity (common services, reusable generic tools, common frameworks and assessment of ICT implications) and the year of inclusion into the rolling Work Programme as well as the year of conclusion, for actions having their funding concluded yet.

Table 2 Tabular overview of the actions

Nr	Action	Action type	Solution type	Inclusion year	Conclusion year
1.Trusted Information exchange					
1.01	Promoting semantic interoperability amongst the EU MS	Project	Common services	2010	Ongoing
1.02	Access to base registries	Study	Common frameworks	2010	Ongoing
1.03	Catalogue of Services	Study	Common frameworks	2010	Ongoing
1.04	ECAS-STORK Integration	Project	Reusable generic tools	2010	2014
1.05	STORK Sustainability	Project	Reusable generic tools	2010	2014
1.06	CIPA (including PEPPOL)	Project	Reusable generic tools	2010	Ongoing
1.07	e-PRIOR	Project	Reusable generic tools	2010	Ongoing
1.08	Trusted Information Exchange [...]	Project	Reusable generic tools	2010	Ongoing
1.09	Supporting tools for TSL [...]	Project	Reusable generic tools	2010	2014
1.10	IMI system	Project	Reusable generic tools	2010	2014
1.11	Interoperable and Generic Notification Services	Project	Reusable generic tools	2010	Ongoing
1.12	OSS platform for online collection of statements of support for ECI	Project	Reusable generic tools	2011	Ongoing
1.13	Legislation Editing software - LEOS	Project	Reusable generic tools	2011	Ongoing

Nr	Action	Action type	Solution type	Inclusion year	Conclusion year
1.14	Cross Sector SOLVIT	Project	Common services	2011	2013
1.15	Open Government Data	Study	Common frameworks	2011	2011
1.16	CISE	Project	Reusable generic tools	2012	Ongoing
1.17	ARE3NA	Project	Reusable generic tools	2012	Ongoing
1.18	Federate Managed Authentication Services for ECAS	Project	Common services	2012	Ongoing
1.19	PEPPOL Sustainability	Project	Common services	2013	2013
1.20	Application of EU Law: [...]	Project	Common services	2013	Ongoing
1.21	European Legislation Identifier (ELI)	Study	Common frameworks	2014	Ongoing
1.22	Big data and open knowledge [...]	Study	Reusable generic tools	2015	Ongoing
2. Interoperability Architecture					
2.01	EIA	Study	Common frameworks	2010	Ongoing
2.02	CAMSS	Study	Common frameworks	2010	Ongoing
2.03	PKI Services	Project	Common services	2010	2014
2.04	sTESTA	Project	Common services	2010	Ongoing
2.05	CIRCABC	Project	Common services	2010	Ongoing
2.06	EUSurvey ²⁰	Project	Common services	2010	Ongoing
2.07	Your Europe - Facilitating reuse of content from national portals	Project	Common frameworks	2010	2011
2.08	MT@EC	Project	Common services	2010	2014
2.09	Document repository services [...]	Project	Reusable generic tools	2010	Ongoing
2.10	Multisectorial crisis and business continuity services	Project	Reusable generic tools	2010	2011
2.11	Promoting consistent EU e-procurement monitoring and performance	Study	Common frameworks	2010	2014
2.12	eHealth EIF	Study	Common frameworks	2011	2012
2.13	EULF	Study	Common frameworks	2012	Ongoing
2.14	Assessment of TES	Study	Common frameworks	2012	Ongoing
2.15	Interoperability agreements on electronic document and electronic file	Study	Common frameworks	2013	Ongoing
2.16	European Single Procurement Document Service	Project	Common services	2014	Ongoing
2.17	eCertis	Project	Reusable generic tools	2014	Ongoing

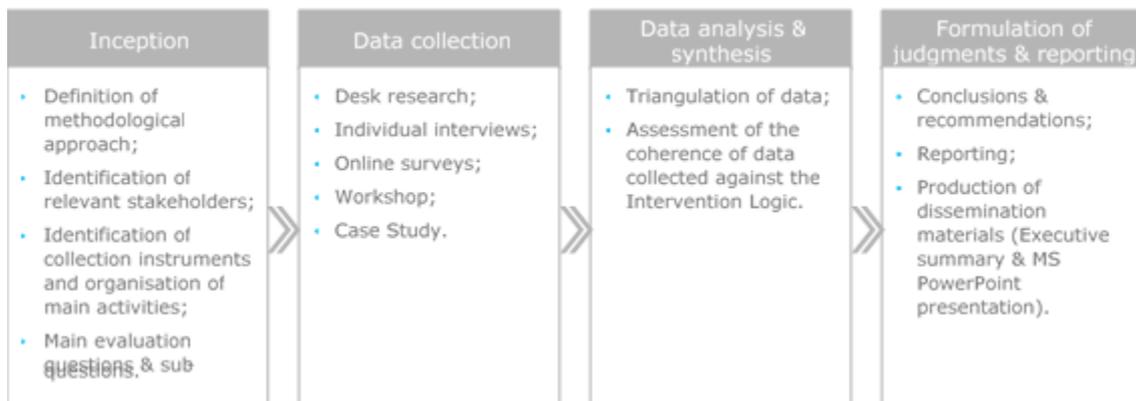
²⁰ The Interactive Policy Making (IPM) has been replaced by EUSurvey and will be completely phased out by end of 2015.

Nr	Action	Action type	Solution type	Inclusion year	Conclusion year
2.18	Participatory knowledge for supporting decision making	Project	Reusable generic tools	2015	Ongoing
3. Assessment of ICT implications of EU legislation					
3.01	Assessment of ICT implications of EU legislation	Study	Assessment of ICT implications of EU legislation	2010	Ongoing
4. Accompanying Measure					
4.1 Raising Interoperability awareness					
4.1.01	Communication activities	Acc. M.	Awareness raising	2010	Ongoing
4.1.02	Interoperability Maturity Model	Study	Common frameworks	2011	Ongoing
4.2 Sharing of best practices					
4.2.01	Integrated Collaboration Platform – Joinup	Project	Common services	2010	Ongoing
4.2.02	Community building and effective use of the collaborative platforms	Acc. M.	Stakeholders involvement	2010	Ongoing
4.2.03	NIFO	Study	Common frameworks	2011	Ongoing
4.2.04	EFIR	Project	Reusable generic tools	2012	Ongoing
4.2.05	Sharing and reuse strategy	Study	Common frameworks	2012	Ongoing
4.2.06	Interoperable testbed	Study	Common frameworks	2013	Ongoing
5. Programme Management					
5.01	Monitoring and Evaluation	Acc. M.	Monitoring & Evaluation	2010	Ongoing
5.02	EIS Governance support	Acc. M.	Management activities	2010	Ongoing

2 Methodology

The final evaluation's methodology²¹ conforms to the methodological guidance for evaluations provided by DG Budget²² and adheres to developments in the Smart Regulation policy²³. It incorporated and expanded on the main evaluation questions, listed in the 'Introduction' section. It is composed of the following four phases, which are elaborated on in this chapter:

Figure 3 Methodology of the final evaluation



Source: European Commission, Evaluating EU Activities: A practical guide for the Commission Services, Office for Official Publications of the European Communities, Luxembourg, 2004.

2.1 Inception (Evaluation structuring)

The inception phase defined the methodology (Figure 3), based on the main evaluation questions and the intervention logic (Figure 4, below) from the interim evaluation of the ISA programme. It also identified the relevant stakeholders. A major part of this inception phase was the choice of adequate data collection methods and the design of processes to support their subsequent implementation. In particular, these activities included:

- The development of specific questions, linked to the main evaluation questions, for the data collection phases, including the identification of related judgement criteria and indicators; and
- Planning and creation of questionnaires/guides for the interviews and online surveys containing the specific questions.

²¹ More detailed information of the methodology is available in the Annex.

²² European Commission, Evaluating EU Activities: A practical guide for the Commission Services, Office for Official Publications of the European Communities, Luxembourg, 2004.

²³ European Commission, Public consultation on Commission Guidelines for Evaluation, DG SG, Brussels, 2013.

The evaluation team's significant investment in the organisation of the data collection activities as part of the inception phase was to ensure the reliability of the information on which a sound analysis could be built. The evaluation team drew on its experience and expertise to determine these elements and construct the overall methodology to conduct the final evaluation.

2.1.1 Evaluation criteria & main evaluation questions

The table below maps the evaluation criteria and their definitions, as contained in the EC's official guidelines²², to the main evaluation questions of the final evaluation of the ISA programme.

Table 3 Mapping of evaluation criteria with main evaluation questions

Evaluation criterion	Evaluation criterion Definition	ISA Final Evaluation - evaluation questions (EQ)
Relevance	The extent to which an intervention's objectives are pertinent to needs, problems and issues to be addressed.	To what extent were the ISA programme's objective(s) pertinent to meet evolving needs and priorities at both national and EU levels?
Efficiency	The extent the desired effects are achieved at a reasonable cost.	How economically were the various inputs converted into outputs?
		Which aspects of the programme were the most efficient or inefficient, especially in terms of resources mobilised?
Effectiveness	The extent to which objectives set are achieved.	To what extent did the ISA programme's results and impacts achieve its objectives?
		Are there aspects that were more or less effective than others, and, if so, what lessons can be drawn from this?
Utility	The extent to which effects correspond with the needs, problems and issues to be addressed	How did the ISA programme's achieved and anticipated results and impacts compare with the business needs they intended to address?
		Which measures could be taken to improve the utility of the next programme's actions?
Sustainability	The extent to which positive effects are likely to last after an intervention has terminated.	To what extent is the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, ensured?
Coherence	The extent to which the intervention logic is non-contradictory/the intervention does not contradict other interventions with similar objectives.	To what extent did the ISA actions form part of a 'holistic' approach within the framework of the programme?
		How well were synergies achieved between programme actions and with other EU activities?
Coordination	The extent to which interventions are organised to maximise their joint effects by mobilising resources combined with harmonising measures.	To what extent did coordination of activities between Member States, including the ISA Committee, exist to ensure stakeholders' engagement in the ISA programme?
		To which extent were activities coordinated or aligned with the needs of other stakeholders with whom the Commission was supposed to interact in the framework of ISA?

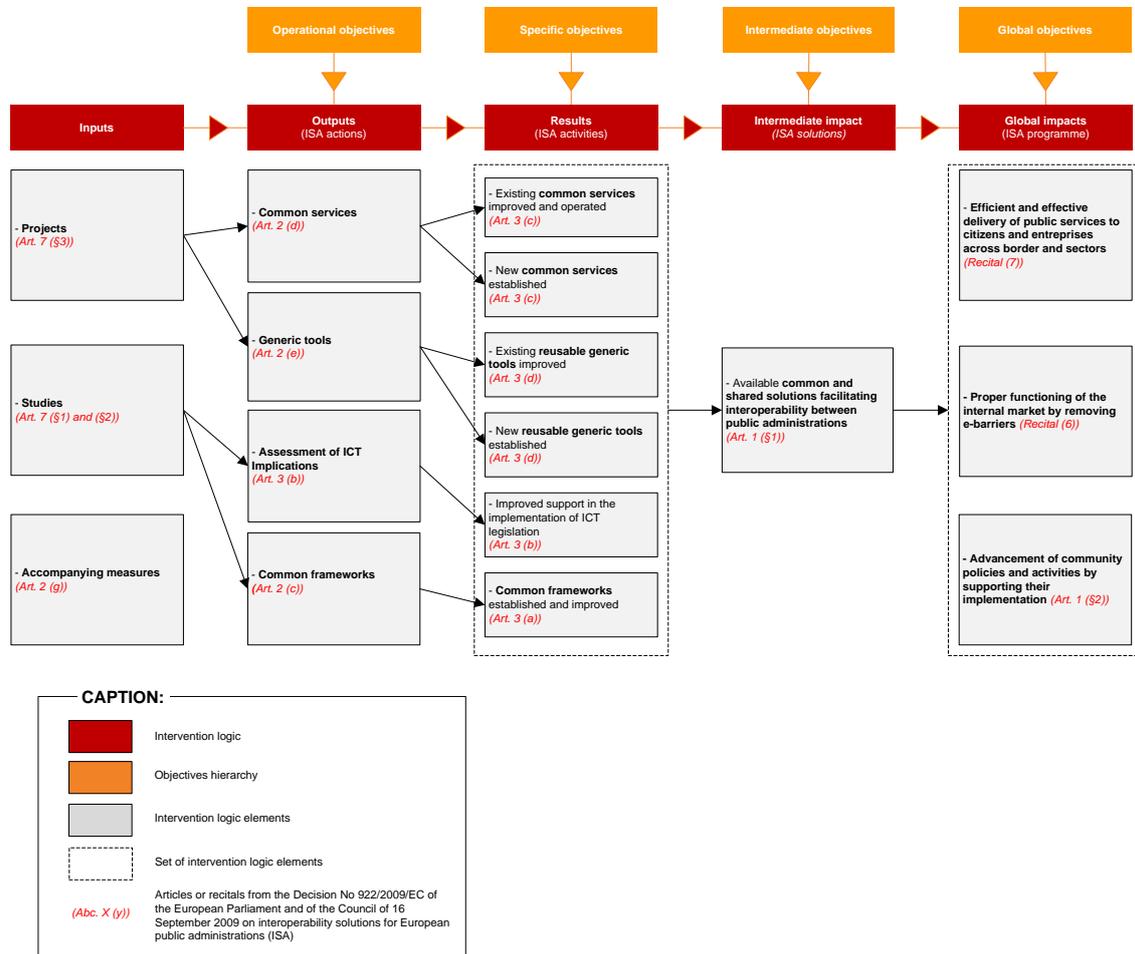
Once these main evaluation issues and associated questions were agreed, the evaluation team defined specific sub-questions, linked to each main evaluation question, to be addressed by the principal data collection methods, the interviews and online surveys as well as by desk

research. These interview and online survey guides are contained in the Annex, which accompanies this report.

2.1.2 Intervention Logic

The EC's official guidelines²² define the intervention logic of a programme as 'the conceptual link from an intervention's inputs to the production of its outputs and, subsequently, to its impacts on society in terms of results and outcomes.' As agreed with the European Commission, the intervention logic of the interim evaluation of the ISA programme was reused for the final evaluation²⁴. The examination of the programme's intervention logic with data collected during the evaluation is of central importance to identify its success in achieving its objectives.

Figure 4 Intervention logic of the ISA programme



²⁴ It is important to note that the European Commission expects that the intervention logic for the evaluation of the future ISA² programme to be different to that of the intervention framework of the final evaluation. This change will take into account ISA²'s different action groups that will be created from re-clustering of different actions (i.e. the ISA Value Chain), the addition of new ones and its altered objectives, even if the latter vary slightly from, or enhance, the ISA programme's.

Source: European Commission, Evaluating EU Activities: A practical guide for the Commission Services, Office for Official Publications of the European Communities, Luxembourg, 2004.

2.1.3 Stakeholders

The ISA unit and the Steering Committee identified the following eight main stakeholder groups as those involved in, or impacted by, the ISA programme. Representatives of these stakeholder groups were involved in the final evaluation's data collection activities.

Table 4 Key stakeholder groups

Stakeholder Group	Description
Officials from DG DIGIT – Unit B.6 Interoperability solutions for European public administrations (ISA)	The unit that commissioned this evaluation and that has the overall responsibility for the management and delivery of the ISA programme.
Members of the ISA Committee, the ISA Coordination Group and ISA Working Groups	Actively participate in the programme.
Monitoring & Evaluation Action contractors & Project Officers outside DG DIGIT's Unit B6	Responsible for managing and monitoring the performance of ISA actions.
Officials from other Commission services	These stakeholders can receive ISA funding to implement ISA actions; work in a DG reusing ISA solution(s); serve as Information Resources Managers (IRMs) or Trans European Systems' (TES) owners; or be in charge of other EU initiatives linked to the ISA programme (e.g. at DG CNECT or DG TAXUD).
Standardisation organisations	Can be involved in, or affected by, the ISA programme.
Other stakeholders	Officials from other EU, local and regional institutions who are involved in, or affected by, the ISA programme in any way.
Direct beneficiaries of the ISA actions	European public administrations including the Commission services.
Indirect beneficiaries	Citizens and businesses.

2.2 Data collection and analytical tools

The data collection methods and analytical tools chosen to answer the evaluation questions are both qualitative and quantitative. The table below provides a summary of these. The Annex accompanying this report contains details on each of these.

Table 5 Data collection and analytical tools

Method/ tool	Description
Desk research	The main objectives of the desk research for the final evaluation were to: <ul style="list-style-type: none"> • Understand the context. • Analyse the objectives, scope, means and instruments of the ISA programme. • Gather preliminary inputs on the relevance of the programme as well as on its coherence with other similar EU initiatives.
Interviews	The major data collection activity of this final evaluation was the series of interviews that the evaluation team conducted with 37 stakeholders.
Online surveys	A series of online surveys was launched and completed subsequent to the series of interviews. Different stakeholder groups were invited to complete specific surveys.
Workshop	A specific workshop with officials from the ISA unit to explore the findings from the interviews and the online surveys was held to obtain additional information and feedback, validate the ISA Value Chain and to agree the case studies to be developed.
Case Study	Two short case studies, based on the State of Play of Interoperability and Semantic Interoperability, were developed in order to provide in-depth analysis and recommendations on how their successes can be further enhanced.

2.3 Data analysis and synthesis

Data analysis and synthesis is the major activity that assessed the data collected during the research phase. It translates data into understandable findings, from which specific conclusions can be drawn as the basis of final recommendations. The following two steps ensured this.

Table 6 Data analysis and synthesis steps

Step	Description
Triangulation	Triangulation of data is defined as 'the use of data collected using different tools and from different sources, and/or analysis from different theoretical perspectives and by different analysts, and at different time' ²⁵ .
Testing of the intervention logic	Investigation of the relationship between evaluation issues and expected benefits, such as outputs, outcomes and impacts defined in the intervention logic.

²⁵ Lisa A. Guion, David C. Diehl, and Debra McDonald, Triangulation: Establishing the Validity of Qualitative Studies, 2011.

2.4 Formulation of judgments and reporting

The activity to formulate robust conclusions on the implementation of the ISA programme and provide useful and practical recommendations on future Work Programmes, in particular the ISA² programme, involved the following three activities:

Table 7 Formulation of judgments and reporting

Activity	Description	Outputs
Formulation of conclusions and recommendations	Conclusions and executable recommendations based on findings from the evaluation's data collection activities and validated by analysis.	<ul style="list-style-type: none"> List of conclusions linked to findings; and List of recommendations linked to their supporting conclusion(s).
Reporting	Overview of the objectives, the methodology, analytical tools, key findings, conclusions and recommendations of the final evaluation of the ISA programme	<ul style="list-style-type: none"> Final Report; Executive Summary; and MS PowerPoint presentation.
Dissemination of recommendations	Results of the final evaluation should be integrated into the Commission's decision making process to contribute to improvements in policy initiatives, programmes and activities, in particular the ISA ² programme, and the instruments used to deliver these.	<ul style="list-style-type: none"> Possible development of an implementation plan to overcome the gaps between the objectives of the ISA programme and its actual achievements.

3 Findings and results

This chapter is divided into seven sections in accordance with the seven aforementioned evaluation criteria.

3.1 Relevance

The evaluation of the relevance of the ISA programme is driven by the following evaluation question (EQ):

EQ1: To what extent were the ISA programme's objective(s) pertinent to meet evolving needs and priorities at both national and EU levels?

As mentioned in section 1.2, the global objective of the ISA programme is to support cooperation between European public administrations, with a view to enable the delivery of electronic public services supporting the implementation of EU policies and activities. The intermediate objective is to facilitate the efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations.

To evaluate whether these objectives were pertinent to meet evolving needs and priorities at both national and EU levels, the evaluation verified the extent to which the needs expressed by European public administrations, at the time of the ex-ante and interim evaluations of the ISA programme, can still be considered as current needs related to interoperability. New evolving needs were also identified in order to assess the extent to which the ISA programme's objectives have addressed them. On the other hand, the evaluation also verifies the pertinence of the programme's objectives to main EU priorities such as the Digital Agenda for Europe.

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ1.

3.1.1 *ISA programme objectives*

With regard to these aforementioned objectives, there was a clear agreement on their continued validity. In fact, 95% of the interviewees and survey recipients agreed (64) or somewhat agreed (41) that the objectives of the programme were still valid today. Moreover, 11 respondents specifically highlighted that there is still work to be performed to fully reach these objectives. It has also to be noted that some respondents (3) clearly suggested that the objectives of any successor programme should not only focus on public administrations but also on public services targeting citizens and businesses. This recommendation has already been taken into account in the proposal for a decision establishing a programme on interoperability solutions for European public administrations, businesses and citizens (ISA²); the proposed general objective

of ISA² is to facilitate interoperability between European public administrations, and also between them and citizens and businesses.

After having verified the level of validity of the programme's objectives, the evaluation also addressed a question particularly focused on the intermediate objective of the programme. In fact, all the respondents were asked about their level of agreement on the extent to which the programme facilitates efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations.

40% fully agreed that the ISA programme facilitated efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations (44), whereas 53% of respondents somewhat agreed (58). The respondents primarily commented that the programme aims to and does facilitate interaction between European public administrations but room for improvement exists to concretely achieve this objective (11).

3.1.2 Needs of EU public administrations

In order to assess the extent to which the objectives of the ISA programme were pertinent to meet evolving needs at national and EU levels, the evaluation firstly identified the main needs of public administrations at both national and EU levels.

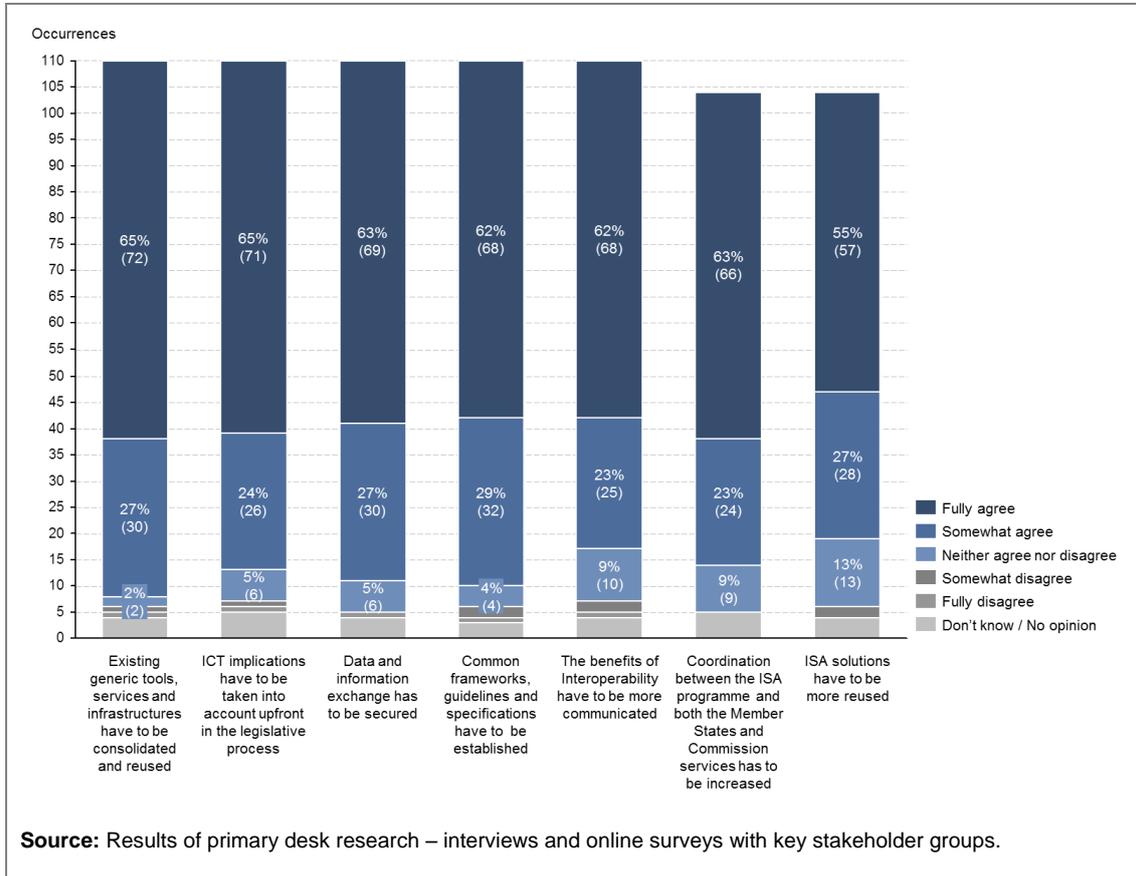
In this regard, the evaluation verified the extent to which the needs expressed by European public administrations at the time of the ex-ante²⁶ and interim evaluations of the ISA programme, shall still be considered as current needs related to interoperability:

- Existing generic tools, services and infrastructures have to be consolidated and re-used;
- ICT implications have to be taken into account upfront in the legislative process;
- Data and information exchange has to be secured;
- Common frameworks, guidelines and specifications have to be established;
- The benefits of interoperability have to be more communicated;
- Coordination between the ISA programme and both the Member States and Commission services has to be increased;
- ISA solutions have to be more reused.

²⁶ Technopolis, Ex ante evaluation of the IDABC follow-on programme, 2008.

Figure 5 depicts the views of the interviewees and survey recipients on the extent to which these needs should still be considered as current needs of EU public administrations.

Figure 5 Needs of EU public administrations



As depicted in Figure 5, a large majority of respondents fully and somewhat agrees that each of the proposed needs should still be considered as current needs of EU public administrations. As a result, the evaluation draws a conclusion that these aforementioned needs have still to be considered as current needs of EU public administrations.

In addition to these aforementioned needs, eight additional ones were identified as potential new needs during the interviews.

Survey respondents have thus been asked to provide their level of agreement to the question 'To what extent do you agree that each of the following [eight potential] needs should be considered as a new or evolving need since the adoption of the ISA programme?'

Out of a total of 67 answers, these eight needs are presented in a descending order based on the number of 'Fully agree' answers by EC officials and Member States to the aforementioned question (indicated in brackets following each one):

1. Improvement of the governance and coordination among Commissions DGs and services on programmes and initiatives related to interoperability (40);
2. Improvement of the governance and coordination between Member States and the Commission on programmes and initiatives related to interoperability (32);
3. Adaptation and update of the focus of the ISA programme to incorporate evolutions in technology that could support interoperability (e.g. Big Data and cloud computing) (27);
4. Need to address security and cyber-security of Member States as part of work related to interoperability (26);
5. Adaptation and update of the focus of the ISA programme to involve businesses, citizens, civil society as stakeholders for the development and use of solutions (26);
6. Incentives for the use of the ISA programme's solutions (e.g. financial support to Member States for adoption and implementation of solutions until operational) (26);
7. Definition and promotion of key interoperability enablers to foster standardisation at national and cross-border levels (25);
8. Improvement of the coordination and cooperation between Member States on programmes and initiatives related to interoperability (23).

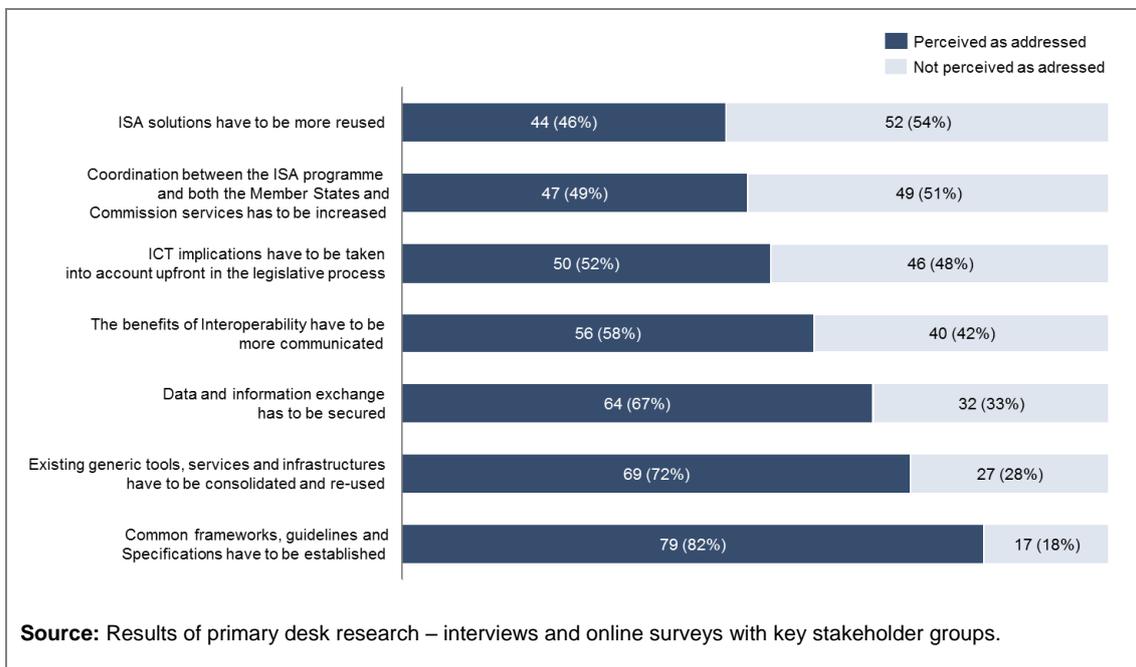
Based on this ranking, the evaluation concludes that an improvement of the governance and coordination among Commissions DGs and services but also between the Commission and Member States on programmes and initiatives related to interoperability are perceived as the main two new needs to be considered. The evaluation notes that these two new needs are beyond the scope and control of the existing ISA programme alone and that the need for an 'increased coordination between the ISA programme and both the Member States and Commission services' was already identified at the time of the interim evaluation. The establishment of the CEF programme, subsequent to the launch of the ISA programme, was frequently mentioned by interviewees and online survey respondents as a reason to ensure 'increased coordination between the ISA programme and both the Member States and Commission services'.

One should note that the opinions on potential needs leading to the aforementioned ranking were homogenous among both EC officials and Member States for most of the needs, except for two of them. In fact, on the one hand, the 'Adaptation and update of the focus of the ISA programme to incorporate evolutions in technology that could support interoperability' was mainly seen as an important need for the EC officials whereas it was the one least cited by Member States. On the other hand, Member States consider the 'Incentivisation of the use of the ISA programme's solutions' as one of the most important needs whereas it was the one that was considered as the least important by EC officials.

3.1.3 Pertinence of the ISA objectives to respond to needs of EU public administrations

The list below presents the extent to which the ISA programme has addressed each of the needs identified at the time of its ex-ante and interim evaluations. These needs are presented in an ascending order based on the number of times that they were recognised as addressed by the ISA programme by the 96 respondents who provided an opinion on this matter as shown in the Figure 6.

Figure 6 Needs addressed by the ISA programme



On the one hand, it appears that the needs of having ISA solutions more reused as well as an increased collaboration between the programme and both the Member States and Commission services are the two needs that have been the least addressed by the ISA programme. In fact, these needs are not seen as addressed by the ISA programme by more than half of respondents.

On the other hand, the following two needs are considered as addressed by the ISA programme by a large majority of respondents (respectively by 72% and 82%):

- Existing generic tools, services and infrastructures have to be consolidated and re-used (69);
- Common frameworks, guidelines and specifications have to be established (79).

With regard to the needs considered as new ones, i.e. improvement in governance & coordination, since the adoption of the programme (cf. previous subsection 3.1.2), respondents were asked to provide their opinion on how the ISA programme has taken them into account.

Based on a total number of 23 answers, the programme has partially taken the aforementioned new needs of European public administrations into account for a majority of respondents (61%) and fully taken them into account for 26% of respondents who provided their opinion on this question. A mere 13% considered that the programme has not taken these new needs of European public administrations into account at all. Nevertheless, 22% of these aforementioned respondents highlighted that the proposed ISA² programme is a good opportunity to take the new evolving needs of European public administrations, i.e. improvement in governance & coordination, more into account.

The evaluation confirms that the current programme is anyway currently taking new evolving needs on governance & coordination into account. In fact, the European Commission is in the process of revising, in close cooperation with the Member States, the European Interoperability Strategy (EIS) and European Interoperability Framework (EIF)²⁷. Indeed, as part of the EIS Revision, the interoperability governance organisation & processes are in the process of being established. This is seen as a fundamental opportunity to address these new evolving needs on governance and coordination.

²⁷ Preliminary results of EIS Action Review conducted under ISA action 5.02 EIS Governance Support.

3.1.4 *Alignment of the ISA objectives with EU priorities*

In order to assess the extent to which the objectives of the ISA programme were also pertinent to meet evolving priorities at EU level, the evaluation verified the alignment of the ISA programme with the following EU initiatives:

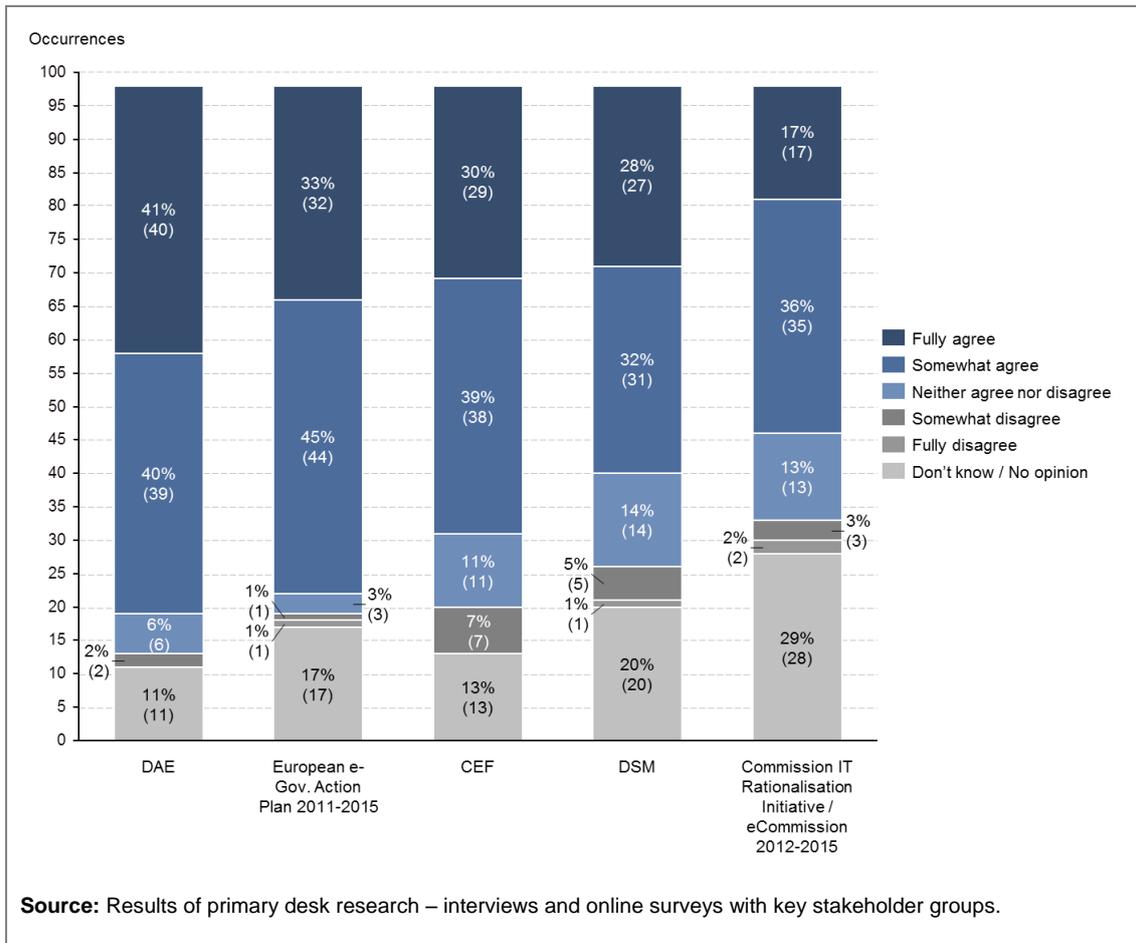
- Digital Agenda for Europe (DAE);
- European eGovernment Action Plan 2011-2015;
- eCommission 2012-2015;
- Commission IT Rationalisation Initiative;
- Connecting Europe Facility (CEF);
- Digital Single Market (DSM) Strategy.

Of 98 EC officials and Member States' representatives who responded, most believed that the ISA programme objectives are primarily aligned with the DAE and with the European eGovernment Action Plan 2011-2015 as well as, to a lesser extent, with the CEF programme and DSM strategy, which were established much later than the DAE and the European eGovernment Action Plan, respectively on 11 December 2013 and 6 May 2015.

In fact, with regard to the alignment between the ISA programme and the DSM strategy, the majority of the interviews were conducted before the establishment of the DSM strategy. This fact explains the reason why the number of 'Don't know/No opinion' answers is higher for this new strategy compared to the number of 'Don't know/No opinion' for DAE, European eGovernment Action Plan or CEF. 80% of respondents were however able to provide their opinion considering that the draft DSM strategy went through inter-service consultation within the European Commission and was made available to Member States as well.

Figure 7 describes the level of alignment of the ISA programme objectives with the aforementioned EU initiatives as perceived by Member States and European Commission officials. These are sorted by the overall number of occurrences of the fully agree answers.

Figure 7 Alignment of ISA objectives with EU initiatives



The objectives of the programme are perceived as less aligned with the eCommission 2012-2015 and Commission IT rationalisation initiative. However, as highlighted by several respondents, the eCommission 2012-2015 as well as the IT Rationalisation initiative are strategies more focused on internal systems of the European Commission whereas the scope of the programme is broader by nature.

In fact, the eCommission 2012-2015 is the European Commission’s IT strategy whereas the Commission IT Rationalisation Initiative is an overall strategy established in October 2010 by the European Commission to rationalise and streamline the IT systems it develops, maintains and operates.

The evaluation found that the highest level of disagreement was related to the alignment between ISA and the CEF programme. The majority of respondents in disagreement with the alignment between CEF and ISA singled out a lack of coordination with DG CNECT. This aspect will be further detailed in Section 3.6.3.

Nevertheless, the factual evidence that several actions previously funded by the ISA programme are now part of CEF Work Programme, e.g. MT@EC, STORK, implies a good alignment between these two programmes and counterbalances the respondents' opinions.

In addition to the EU initiatives depicted in Figure 7, respondents were also asked about the alignment of ISA with any other EU initiatives. In that regard, one main additional initiative was identified by five respondents, namely INSPIRE.

With regard to the perceived alignment with INSPIRE, the evaluation considers that this can be primarily due to two main reasons. Firstly, in 2012, two new actions linked to the INSPIRE directive, namely AR3NA (1.17) and EULF (2.13) were included in the revised ISA Work Programme. Secondly, as explained in section 1.3, the ISA programme also established, in 2013, in the context of these two ISA actions, a dedicated ISA-INSPIRE Working Group on 'Spatial Information and Services'. This Working Group plays an important advisory role, helping to define requirements and priorities and to establish the direction of the two aforementioned ISA actions. It aims to help to facilitate dialogue between the e-government and European geospatial communities, in general, and between ISA and the community implementing the INSPIRE directive in particular.

The establishment of this Working Group can be seen as a positive result in the light of the new evolving needs identified in subsection 3.1.2, especially the new evolving need for improvement of the governance and coordination among Commissions DGs and services on programmes and initiatives related to interoperability.

The remainder of this subsection contains further details on the alignment of the programme with major EU initiatives based on desk research in order to clarify the reality. Specifically, these major EU initiatives are the Digital Agenda for Europe (DAE), the European eGovernment Action Plan 2011-2015, the Connecting Europe Facility (CEF) and the Digital Single Market (DSM) Strategy.

3.1.4.1 Digital Agenda for Europe (DAE)

On 19 May 2010, the Commission adopted a Communication proposing a Digital Agenda for Europe, one of the seven flagship initiatives of the Europe 2020 Strategy, set out to define the key enabling role that the use of ICT will have if Europe wants to succeed in its ambitions for 2020.

Considering that the Digital Agenda for Europe is composed of 132 actions divided into seven pillars, the evaluation aims to verify the pertinence of the ISA programme to the DAE pillars. In this respect, the ISA programme is primarily aligned with the following three DAE pillars:

- Pillar I: Digital single market;
- Pillar II: Interoperability and standards;

- Pillar VII: ICT-enabled benefits for EU society.

Based on evidences provided by the ISA Work Programme revisions and the interim evaluation of the programme, the evaluation confirms that several ISA actions are pertinent to DAE actions under these pillars. For each identified pillar, the specific DAE action is linked with the relevant ISA action(s) in Table 8. Further details about this alignment are available in Annex.

Table 8 Alignment of the ISA programme with the DAE

DAE action	Related ISA action(s)
Pillar I Digital Single Market	
Action 3 - Open up public data resources for reuse aims at opening up public data resources for reuse by reviewing the PSI Directive.	1.01 - Promoting semantic interoperability amongst the European Union Member States 1.02 - Access to base registers 1.15 - Open Government Data 1.22 - Big Data and Open Knowledge for public administrations 2.18 – Participatory knowledge for supporting decision making
Action 8 - Revision of the eSignature Directive aims at proposing a revision of the eSignature Directive with a view to provide a legal framework for cross-border recognition and interoperability of secure eAuthentication systems.	1.05 - STORK Sustainability 1.09 - Supporting tools for TSL and e-signature creation/verification
Action 107 - Proposals to strengthen the data industry in Europe	1.21 - European Legislation Identifier 1.22 - Big Data and Open Knowledge for public administrations
Pillar II - Interoperability and standards	
Action 23 - Provide guidance on ICT standardisation and public procurement aims at issuing a Communication in 2011 to provide guidance on the link between ICT standardisation and public procurement to help public authorities use standards.	2.02 – CAMSS 2.16 - European Single Procurement Document Service 2.17 – eCertis
Action 24 - Adopt a European Interoperability Strategy and Framework aims at promoting interoperability by adopting in 2010 a European Interoperability Strategy (EIS) and European Interoperability Framework (EIF).	4.2.03 – NIFO 5.02 - EIS Governance support
Action 26 - MS [Member States] to implement European Interoperability Framework suggests Member States to apply the European Interoperability Framework at national level by 2013.	4.2.03 - NIFO
Action 27 - Member States to implement Malmö and Granada declarations	1.08 – e-TrustEX 4.2.03 - NIFO
Pillar VII - ICT-enabled benefits for EU society	
Action 76 - Propose a recommendation to define a minimum common set of patient data	1.01 - Promoting semantic interoperability amongst the European Union Member States
Action 77 - Foster EU-wide standards, interoperability testing and certification of eHealth aims at fostering EU-wide standards, interoperability testing and certification of eHealth systems by 2015 through stakeholder dialogue	2.12 - eHealth European Interoperability Framework 4.2.06 - Interoperability Testbed
Action 84 - Support seamless cross-border eGovernment services in the single market	1.05 - STORK Sustainability 1.06 - Common Infrastructure for public administrations Sustainability (CIPA) 1.14 - Cross Sector SOLVIT 2.04 - sTESTA

DAE action	Related ISA action(s)
	4.2.06 - Interoperability Testbed
Action 88 - Create and implement an ambitious eCommission 2011-2015 Action Plan.	1.07 - e-PRIOR
Action 89 - Member States to make eGovernment services fully interoperable	1.01 - Promoting semantic interoperability amongst the European Union Member States
	1.08 - e-TrustEx
	2.01 - EIA
	4.1.02 - Interoperability Maturity Model
	4.2.01 - ISA Integrated Collaborative Platform
	4.2.03 - NIFO
	4.2.06 - Interoperability Testbed
Action 110 - Deploy and roll out digital services in key areas of public interest	1.07 - e-PRIOR
	1.10 - Internal Market Information (IMI) System
	1.14 - Cross Sector Solvit
	2.12 - eHealth European Interoperability Framework

The Digital Agenda for Europe was updated at the end of 2012²⁸ and additional actions have been included under its umbrella as of 2013. Compared to the alignment that was already observed at the time of the interim evaluation between the ISA programme and the first set of actions of the DAE, it should be noted an alignment between ISA actions and the aforementioned additional DAE actions. In fact, ISA actions included in the first ISA Work Programmes (e.g. ISA action - 1.07) as well as new actions included after 2012 are aligned with the initial (e.g. alignment between ISA action 4.2.06 and the DAE action 77) as well as updated version of the DAE (e.g. ISA action 1.21 and 1.22 with the new DAE action 110).

3.1.4.2 *European eGovernment Action Plan 2011-2015*

In order to support and complement the Digital Agenda for Europe, the European Commission proposed a European eGovernment Action Plan 2011-2015²⁹ aimed to support the provision of a new generation of eGovernment services for businesses and citizens.

The Action Plan identifies four political priorities (user empowerment, internal market, efficiency and effectiveness of eGovernment and administrations, pre-conditions for developing eGovernment) based on the Malmö Declaration, agreed on 18 November 2009 at the 5th Ministerial eGovernment Conference in Malmö, Sweden, and proposes concrete actions and measures to be implemented by the Commission and the Member States by 2015.

As described in Table 9, the ISA programme is also aligned with these four priorities. Further details about this alignment are available in Annex.

²⁸ Press release on the next digital priorities for 2013-2014.

²⁹ COM (2007) 574 - Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - An Integrated Maritime Policy for the European Union, Brussels, 10.10.2007.

Table 9 Alignment of the ISA programme with the European eGovernment Action Plan 2011-2015

Priority	Action	Related ISA action(s)
User Empowerment		
1.2 - Collaborative Production of Services	4 - Exchange of knowledge and expertise, agreement on common targets for the roll out of collaborative services	1.18 Federated Authorisation Across European public administrations
1.5 - Involvement of citizens and businesses in policy-making processes	12 - Development of the electronic service to support 'citizens initiatives'	1.12 - Open source software for online collection of statements of support for European citizens' initiatives[1]
2.1 - Seamless Services for Businesses	15 - Outcomes assessments of PEPPOL and SPOCS	1.06 - CIPA Sustainability
Internal Market		
2.2 - Personal mobility	19 - Exchange of best practice and coordination of the efforts to jointly develop and set up interoperable eDelivery services.	1.03 - Catalogue of services
	20 - Provision of cross-border and interoperable eDelivery services for citizens	1.10 - Internal Market Information (IMI) System
		1.14 - Cross Sector SOLVIT
2.3 - EU-wide implementation of cross-border services and new services	21 - Study of the demand for cross-border services, assessment of the organisational, legal, technical and semantic barriers	1.01 - Promoting semantic interoperability amongst the European Union Member States
Efficiency and Effectiveness of eGovernment and Administrations		
3.1 - Improving Organisational Processes	25 - Facilitate exchanges of experience, successful solutions and applications, exploring new approaches improving organisation process	4.2.01 - ISA Integrated Collaborative Platform
		4.2.02 - Community building and effective use of the collaborative platforms
		4.2.03 - NIFO
3.2 - Reduction of Administrative Burdens	29 - Sharing of experiences on implementation of the 'once only' registration principle and on electronics procedures and communications, cost-benefit analysis and roadmap design	1.02 - Access to base registries
		1.18 - Federated Authorisation Across European public administrations
Pre-conditions for developing eGovernment		
4.1 - Open Specifications and Interoperability	32 - Put into the European Interoperability Framework (EIF) and the European Interoperability Strategy (EIS)	4.2.03 - NIFO
		5.02 - EIS Governance support
	33 - Exchanges of expertises, promotions of the reuse and sharing solution to implement interoperable eGovernment services	1.08 - Trusted Exchange Platform (E-TRUSTEX)
		4.2.01 - ISA Integrated Collaborative Platform Joinup
		4.2.02 - Community building and effective use of the collaborative platforms
		4.2.03 - NIFO
	34 - Alignment of national interoperability frameworks to the EIF	2.15 - Interoperability agreements on electronic document and electronic file
		4.2.03 - NIFO
		5.02 - EIS Governance support

Looking forward, it is important to note that the ISA programme is in the process of being aligned with the future eGovernment Action Plan 2016-2020³⁰. This is being developed within the framework of the Digital Single Market strategy, which is covered below in this sub-section. As part of this, the ISA programme participated in two workshops on the new EU eGovernment Action Plan in June and September 2015³¹. The eGovernment Action Plan 2016-2020 will include an initiative on the application of the 'once-only principle' (OOP), which means that citizens and businesses supply information to public administrations only once.

The application of this principle is quite difficult in a cross-border context, considering that it is already challenging for Member States to apply in a national context, which is obviously a prerequisite. Nevertheless, it can be achieved technically through a pilot with Member States to achieve the interconnection of databases, i.e. national registers, to avoid asking citizens and businesses for information more than once. Evidently, the ISA programme has a role to play here, in particular, given its work under action 1.02 Access to Base Registries. In addition, another intended pillar of the future eGovernment Action Plan 2016-2020 is to accelerate Member States' transition towards full e-procurement and interoperable e-signatures, where the work done under actions 1.07 and 1.09 respectively provides the ISA programme with great potential to contribute.

3.1.4.3 Connecting Europe Facility (CEF)

The Connecting Europe Facility (CEF) is the common financing instrument of Trans-European networks for the period 2014-2020. During this period, CEF will help to complete the European single market by making available EUR 33.24 billion in the form of procurement, grants and innovative financial instruments.

CEF will finance projects of common interest in three different sectors: transport (EUR 26.25 billion), energy (EUR 5.85 billion) and telecommunications (EUR 1.14 billion)³².

Within the telecommunications area, 170 million euros are earmarked for Broadband activities, while 970 million euros are dedicated to Digital Service Infrastructures (DSIs) delivering networked cross-border services for citizens, businesses and public administrations. These projects are to:

³⁰ COM (2015) 192 final - Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the committee of the regions - A Digital Single Market Strategy for Europe. 06.05.2015.

³¹ Workshop on new EU eGovernment Action Plan

³² Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010 Text with EEA relevance (Regulation located in OJ L 348, 20.12.2013, p. 129–171).

- improve the competitiveness of the European economy;
- promote the interconnection and interoperability of national, regional and local networks; and
- facilitate access to such networks, thus supporting the development of a Digital Single Market³³.

After careful consideration of the respective Work Programmes, the evaluation confirms that several actions included in ISA's 2015 Work Programme are pertinent to 7 out of 11 planned CEF's digital service infrastructures (DSIs) under its 2014 and 2015 Work Programme. Table 10 summarises the alignment of the ISA programme with the old and new DSIs as included in the Work Programmes (WP) for 2014 or 2015 respectively. Further details about this alignment are available in Annex. As shown in this table, most of the link existing between ISA actions and DSIs included in the CEF 2014 WP are due to the fact that several mature ISA solutions have been taken over by the CEF programme as of 2014.

Table 10 Alignment of the ISA programme with CEF

DSI	Related ISA action(s)	ISA solutions taken over by CEF
DSIs already supported under CEF WP 2014		
Electronic identification and authentication — eidentification and eSignature (Generic Services)	1.04 - ECAS-STORK integration	
	1.05 – STORK Sustainability	✓
	1.09 - Supporting tools for TSL and e-signature creation/verification	✓
	1.18 - Federated Managed Authentication Services for ECAS	
eDelivery (Generic Services)	4.2.06 – Interoperability Testbed	
	1.06 - CIPA	✓
	2.04 - Data Communication Network Service (sTESTA)	
eInvoicing (Generic Services)	4.2.06 – Interoperability Testbed	
	1.07 – e-Prior	
Open Data (Generic Services)	4.2.06 – Interoperability Testbed	
	1.01 - Promoting semantic interoperability amongst the European Union Member States	
	1.02 - Access to base registers	
Automated Translation (Core Platform)	1.15 - Open Government Data	
	2.08 - Machine Translation Service by the European Commission	✓
New DSIs in WP 2015		
eHealth (Core Platform; Generic Services)	2.12 - eHealth European Interoperability Framework	
eProcurement (eCertis) (Generic Services)	1.07 - e-Prior	
	2.16 - European Single Procurement Document Service	
	2.17 – eCertis	

³³ Connecting Europe Facility

3.1.4.4 Digital Single Market (DSM) Strategy

The Digital Single Market Strategy, recently adopted by the Commission on 6 May 2015³⁴, aims to open up digital opportunities for people and business and enhance Europe's position as a world leader in the digital economy.

The DSM strategy includes a set of 16 targeted actions to be delivered by the end of 2016 and is built on the following three pillars:

- Pillar I: Better access for consumers and businesses to digital goods and services across Europe;
- Pillar II: Creating the right conditions and a level playing field for digital networks and innovative services to flourish; and
- Pillar III: Maximising the growth potential of the digital economy.

The evaluation highlights that the ISA programme remains relevant primarily for pillar III as some of its initiatives have links to ISA actions. Table 11 summarises the pertinence of the ISA programme towards this pillar. However, the evaluation would like to raise the following caveat. Given that the DSM strategy was only adopted in May 2015, after the adoption of the latest ISA Work Programme, the alignment of the ISA programme with its actions and priorities is difficult to capture. Further details about this alignment are however available in Annex.

Table 11 Alignment of the ISA programme with the DSM Strategy

Actions	Related ISA action(s)
Pillar III. Maximising the growth potential of the digital economy	
15. Adoption of a Priority ICT Standards Plan and extending the European Interoperability Framework for public services	1.01 - Promoting semantic interoperability amongst the European Union Member States
	2.01 – European Interoperability Architecture (EIA) ³⁵
	2.02 - CAMSS - Common Assessment Method Standards and Specifications ³⁵
	4.2.03 – National Interoperability Framework Observatory (NIFO)
16. New e-Government Action Plan including an initiative on the 'Once-Only' principle and an initiative on building up the interconnection of business registers	1.02 – Access to base registries

Overall, the most significant relevance is related to action 15 from the DSM: in the roadmap of

³⁴ COM (2015) 192 final - Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the committee of the regions - A Digital Single Market Strategy for Europe. 06.05.2015.

³⁵ This is not based on desk research, but on interviews with the ISA unit. At the time of writing this report, the evaluators did not have any public information available related to the European Catalogue of Standards, which is part of action 15 from the DSM.

the recently published Communication, it is mentioned the need to revise and extend the European Interoperability Framework (EIF). The ISA programme is, at the time of this report, in the process of revising the European Interoperability Strategy and, through the NIFO action, extending the European Interoperability Framework. On the other hand, the results of action 1.02 Access to Base Registries, i.e. best practices and recommendations, are in line with the future initiative on the 'Once-Only' principle, which is part of action 16 of the DSM.

3.1.5 Conclusions

The following box summarises the main conclusions related to EQ1: 'To what extent were the ISA programme's objective(s) pertinent to meet evolving needs and priorities at both national and EU levels?'

Conclusion N°1

As mentioned, the ISA programme aims to support cooperation between European public administrations, with a view to enabling the delivery of electronic public services supporting the implementation of EU policies and activities. The evaluation considers this objective as still valid today. Even if room for improvement exists to concretely achieve this objective (see subsections 3.2 to 3.4), it is confirmed that the programme does facilitate interaction between European public administrations.

The modified scope of the follow-on ISA² programme will, most likely, enhance this objective. The follow-on ISA² programme's scope aims to facilitate electronic cross-border or cross-sector interaction between European public administrations, businesses and citizens as well as between European public administrations.

Conclusion N°2

The needs of European public administrations, identified at the time of the ex-ante and interim evaluations of the ISA programme (cf. subsection 3.1.2), are still considered as the current needs of European public administrations today.

However, the follow-on programme should further address the need **to have** ISA solutions more reused as well as the need for an increased collaboration between the programme and both the Member States and Commission services. The opinion of interviewees and survey respondents was clear in this regard. The current usage levels of ISA solutions, as documented by the desk research contained in section 3.4, show that there is considerable potential for their greater levels of adoption and use, which reinforces this conclusion.

The evaluation confirms that the programme should focus more on the reuse of the existing solutions but **that, as a voluntary policy, the ISA programme has no capacity to guarantee greater reuse of its solutions and increased collaboration depends on the willingness of all stakeholders.**

Conclusion N°3

In addition to these needs already identified by previous evaluations, the stakeholders involved in the final evaluation identified new evolving needs primarily related to the governance and coordination of interoperability initiatives at EU level, in particular among Commission DGs and between Member States and the Commission. The evaluation concludes that the programme has already started to take into account new evolving needs of European public administrations on governance & coordination, primarily through the revision of the EIS and through enhanced coordination within the EC (cf. subsection 3.7.1).

Overall, the ISA programme objectives are well aligned with the Digital Agenda for Europe and with the European eGovernment Action Plan 2011-2015 as well as with the CEF programme and DSM strategy. It is important to recall, however, that both the CEF programme and the DSM strategy were established much later than the DAE and the European eGovernment Action Plan, respectively on 11 December 2013 and 6 May 2015.

Indeed, the findings from the interviews and surveys showed that, in general, EC officials and Member States' representatives believed that the ISA programme's objectives were more aligned with the DAE and with the European eGovernment Action Plan 2011-2015 than with the CEF programme and DSM strategy, most likely because of the launch of the latter two after the ISA programme. Nevertheless, the factual evidence that several actions previously funded by the ISA programme are now part of CEF Work Programme (e.g. MT@EC, STORK, etc.) implies a good alignment between these two programmes.

The ISA programme is also well aligned with the Digital Single Market strategy. This is illustrated by the extension of the European Interoperability Framework for public services, primarily through its revision, which builds on the work done in the last number of years by action 4.2.03 NIFO. Additionally, in the framework of Digital Single Market strategy, the ISA programme is in the process of being aligned with the future eGovernment Action Plan 2016-2020, which will include making the interconnection of business registers a reality by 2017 (action 1.02 Access to Base Registries), launching an initiative with the Member States in 2016 to pilot the 'Once-Only' principle and accelerating Member States' transition towards full e-procurement and interoperable e-signatures (actions 1.07 and 1.09).

3.2 Efficiency

The evaluation of the efficiency of the ISA programme is driven by the following evaluation questions:

EQ2: How economically were the various inputs converted into outputs?

EQ3: Which aspects of the programme were the most efficient or inefficient, especially in terms of resources mobilised?

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ2 and EQ3.

3.2.1 *Revision process of the ISA Work Programme*

As mentioned in section 1.4, the Commission must approve at least once a year any modification of the ISA Work Programme. In this respect, DIGIT requests the members of the ISA Committee, as well as the different Commission services, to submit their proposals for new actions to be included in the rolling Work Programme.

Proposals may either be for projects, studies or accompanying measures and should be related to the activities defined in Article 3 of the Decision:

- Establishment and improvement of common frameworks in support of interoperability across borders and sectors. Common frameworks are strategies, specifications, methodologies, guidelines and similar approaches and documents.
- Assessment of ICT implications of EU legislation as well as the planning of the implementation of ICT systems in support of the implementation of such legislation.
- Establishment, industrialisation, operation and improvement of common services that are operational applications and infrastructures of a generic nature.
- Establishment and improvement of reusable generic tools that are reference platforms, shared and collaborative platforms, common components and similar building blocks.

These proposals must comply with the ISA legal decision's objectives as stipulated in its Article (1). In addition, in accordance with Article 2³⁶ of the Decision, proposals for common services or generic tools should demonstrate their readiness to cover multiple sectors; for example by being jointly introduced by several Directorates-General or by one Directorate General (DG) acting on behalf of a group of DGs sharing common requirements.

³⁶ The proposed actions must be related to measures that "meet common user requirements across different policy areas", notably in support of cross-border and cross-sector interoperability.

Every year, once proposals are received by the ISA unit, the revision process is launched and follows three main steps:

- A first draft revision of the Work Programme is elaborated and sent to the ISA Coordination Group members. The rolling Work Programme should include a description of each action, as stated in Article 9(4) of the ISA legal decision. In case an action is selected for funding, most of the information provided through the proposals will be integrated into the rolling ISA Work Programme, which will be presented to the ISA Committee for its opinion and subsequently will be adopted by the Commission.
- Based on the deliberations of the ISA Coordination Group, a second draft revision is designed and sent to inter-service consultation.
- Based on the replies submitted by the Commission Services, the final draft revision of the Work Programme is presented to the ISA Committee that must deliver its opinion, prior to the adoption of the Work Programme by the Commission.

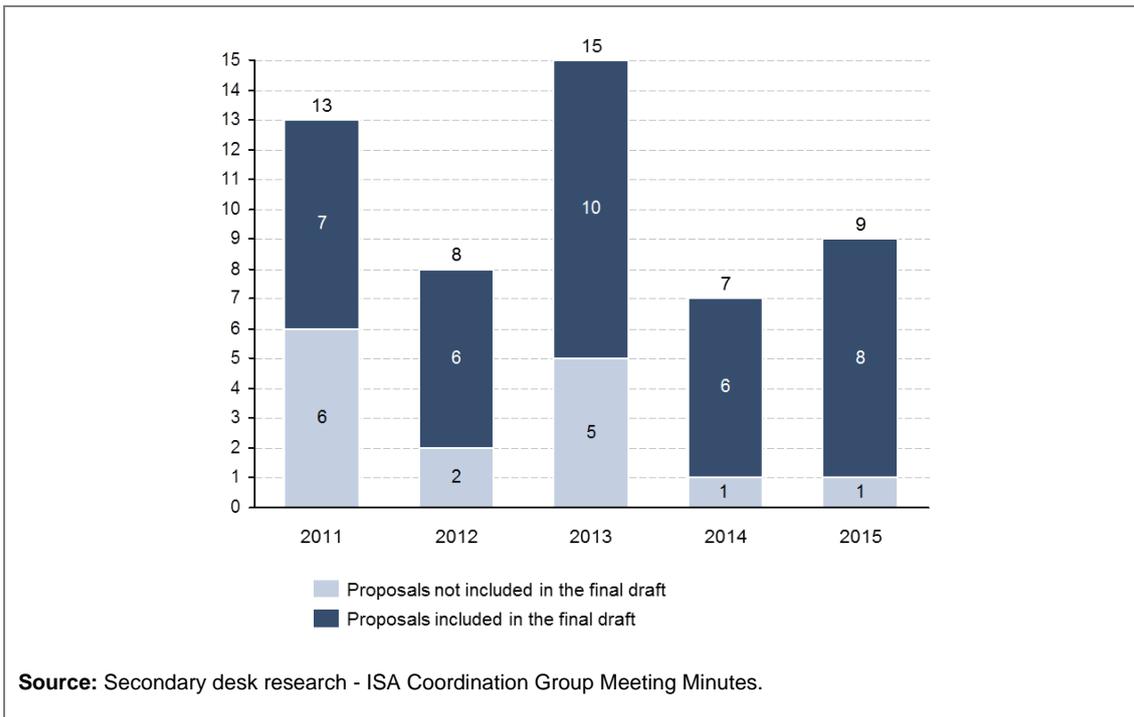
The comments from both ISA Coordination Group members (first draft revision) and Commission services (second draft revision), through inter-service consultations, are taken into account in the final draft submitted to the ISA Committee. These two steps should be sufficient to ensure that the final draft of the Work Programme receives a favourable opinion by this Committee.

Based on the adopted Work Programmes in the period 2011-2015, the evaluation concludes that the revision process is efficient, since each revision of the Work Programme received a favourable opinion from the ISA Committee³⁷. However, as further detailed in sub-section 3.3, the inclusion of EUSurvey in each of the Work Programme revisions was questioned by four respondents. The evaluation acknowledges that, even if this ISA solution supports different EU policies and contributes to eParticipation³⁸, it does not facilitate interaction between European public administrations. Figure 8 describes in details the number of proposals for new actions included and not included during the different Work Programme revisions.

³⁷ Indeed, that was the case for the IDABC programme in 2005. As stated in the final evaluation of the IDABC programme, an action not approved by PEGSCO was included in the IDABC work programme.

³⁸ The initial objective of EUSurvey (formerly known as IPM (interactive Policy Making)) should be seen in the context of the IPM Initiative, aiming at using modern technology to allow Member States administrations and EU Institutions to understand the needs of citizens and businesses improving the assessment of impacts of policies and providing greater accountability to citizens.

Figure 8 Selection of proposals for new actions in the different Work Programme revisions



Concerning the proposals included in the final draft, proposals were in some cases integrated into existing actions, and in other cases included as new action within the amended Work Programmes³⁹.

However, considering that some proposals were not included in the Work Programme revisions, it might be that either the selection criteria were not clear enough or not enough attention was given to these criteria when writing the proposals (e.g. proposals were rejected in 2013 due to the fact that their scopes were more related to national needs only and, thus, not aligned with the scope and objectives of the programme).

Respondents were thus asked to provide their feedback on the selection procedures applied by the ISA programme.

Overall, the selection procedures of proposals are indeed considered as fully or somewhat appropriate, so that the ISA actions selected for funding comply with the overall objectives of the programme, by 74% of all interview and survey respondents (35), with only 2% (1) of respondents finding them somewhat inappropriate. Minor deficiencies in the selection procedures were usually caused by a lack of involvement of Member States due to the

³⁹In 2013, five of the proposals were integrated into existing actions and five were presented as new actions. On the other hand, in 2014, five of the proposals were integrated into existing actions and one was presented as a new action.

complexity of the process and, hence, a need for extra support or guidance. However, this need is not major as most Member States' representatives (68% (28)) felt fully or somewhat involved in the annual revisions of the ISA Programme. It is interesting to note that, if they did not, it was more often than not due to internal issues (e.g. in Denmark, or Sweden).

Interestingly, even though the involvement of Commission services was not a key concern in the open-ended questions, the analysis showed that a lower percentage of respondents of this group felt fully or somewhat involved (58% (28)). The evaluation confirms that both Member States' representatives and EC officials could participate in the selection process through different means: inter-service consultations, management meetings or by provision of direct comments/inputs to consultations.

Overall, both Member States' representatives and EC officials expressed satisfaction with their levels of involvement in the consultations. Only two respondents believed that further guidance and support on the selection procedure would be beneficial. The overall level of satisfaction about the provision of guidance and information from the Commission in regard to the selection procedures is good, with 57% (52) of the participants being fully or somewhat satisfied.

During the interim evaluation, the Member States' representatives expressed the need for further guidance and support to enable them to better participate in the proposals selection. Along with Member States' representatives, the EC officials expressed similar needs at that time.

The evaluation highlights that, compared to the findings of the interim evaluation, progress has been made in relation to stakeholders' levels of satisfaction regarding the selection of proposals for new ISA actions.

One should note that, at the time of the final evaluation; EC officials were less likely to be fully or somewhat satisfied (53% (26)) than the Member States' representatives (63% (26)) with the information and guidance provided by the Commission. Furthermore, none of the Member States' representatives was fully or somewhat dissatisfied with the level of information and guidance provided by the European Commission, whilst 12% (6) of EC officials expressed some sort of dissatisfaction. Nevertheless, EC officials did not mention any specific problem on the provision of information and guidance during the selection of the proposals. On the other hand, although a majority of Member States' representatives were fully or somewhat satisfied, they presented several measures that could even ease more the process of selection of proposals for them and, as a result, increase the overall efficiency of this process. These included the following measures:

(l) Increase the time to read the necessary documentation and the time for the development of the proposals; with regard to this point, the evaluation acknowledges that DG DIGIT provides both Member States and Commission services with over two months for the development and submission of a proposal. For example for the round of 2014, the Commission services were

advised on 26th June 2014 with deadline for submission on 1st September, and for the round of 2015, the Commission services were advised on 22nd June 2015 with deadline for submissions on 17th August 2015. The evaluation confirms that the given time, of at least 8 weeks, shall be sufficient.

(II) Improve the precision and clarity of the documented process about the selection of proposals for new actions; including the improvement of clarity of the selection criteria related to the coordination of activities between the stakeholders. This shall be done in order to avoid inefficiencies, such as duplication of the work or other procedural misunderstandings, in the coordination of activities between ISA and the Member States in the process of preparation and approvals of proposals.

With regard to this point, the evaluation acknowledges that DG DIGIT provides both Member States and Commission services with Work Programme template, as well as explanatory notes to help them in proposals' preparation. Furthermore, three main contacts from DG DIGIT are available to provide the necessary guidance and clarifications. The template includes all necessary elements to evaluate a proposal. This is judged by the evaluation as satisfactory even if, as mentioned by four Member States' representatives as well as by one EC official, a more precise and clear documented process about the selection of proposals for new actions could be helpful; particularly for the new or recent stakeholders.

3.2.2 *Implementation rules*

Each action funded by the ISA programme should comply with the six implementation rules defined in Article 8 of the ISA legal decision:

1. In the implementation of the ISA programme due consideration must be given to the EIS and the EIF.
2. Involvement of the largest possible number of Member States in a study or project must be encouraged. A study or project must be open for accession at any stage, and Member States not involved in a study or project must be encouraged to join at a later stage.
3. In order to ensure interoperability between national and EU systems, common frameworks, common services and generic tools must be specified with reference to existing European standards or publicly available or open specifications for information exchange and service integration.
4. The establishment or improvement of solutions must, where appropriate, build on or be accompanied by the sharing of experience and the exchange and promotion of good practices.
5. In order to avoid duplication and to speed up the establishment of solutions, results achieved by other relevant Community and Member State initiatives must be taken into account, where appropriate.
6. The initiation of actions, the definition of the phases of such actions and the establishment of project charters and execution reports must be carried out and monitored by the Commission as part of the implementation of the rolling Work Programme established in accordance with Article 9.

Accordingly, a majority of respondents (66%) fully or somewhat agreed that due consideration is given to the EIS and the EIF in the implementation of the ISA programme (implementation rule N^o1), whilst only 4% of respondents (4) fully or somewhat disagreed. Overall, 66% (64) of respondents fully or somewhat agree that the involvement of the largest possible number of Member States in ISA actions is encouraged (implementation rule N^o2), whilst only 5% (5) of them fully or somewhat disagree with the statement. This opinion is shared by both EC officials and Member States' representatives, which confirms that the implementation of the ISA actions adheres to the second implementation rule. With regard to the involvement of Member States in ISA actions, the lack of financial or human resources at national level was mentioned by three respondents as a barrier limiting their involvement.

After further analysis of respondents' answers, the evaluation concludes that there is a general satisfaction among stakeholders on the application of implementation rules N^o3, N^o4 and N^o5 for selecting new proposals. Firstly, an overwhelming majority of respondents (77%) fully or somewhat agree that the ISA solutions are specified with a reference to existing European

standards or open specifications (third implementation rule), whilst only 2% of respondents (2) fully or somewhat disagree. Secondly, 66% of respondents (64) fully or somewhat agree that the establishment or improvement of solutions is, where appropriate, built on/accompanied by the sharing of experience and the exchange and promotion of good practices (fourth implementation rule). Thirdly, the fifth implementation rule is also regarded as sufficiently adhered to by the different ISA actions as 63% (63) of respondents fully or somewhat agree on this issue. However, with regard to the fifth implementation rule, the ISA programme was criticised by seven respondents who considered it primarily not sufficiently proactive and lacking the general overview of all of the results achieved by other relevant EU and Member State initiatives. Nevertheless, a few successful examples were mentioned by the respondents. For example, work undertaken separately by several Member States on automatic translation was subsequently integrated by the ISA programme into the action 2.08 MT@EC.

Lastly, the perception of respondents is positive about the ISA programme's performance regarding the sixth implementation rule, which aims to maximise synergies and ensure complementary and combined efforts. A small minority (3) of respondents would prefer the process of monitoring to become more open and transparent. A majority of respondents (74%) fully or somewhat agreed that the initiation of the action, the definition of the phases of such actions and the establishment of project charters and execution reports is carried out and monitored by the Commission, whilst no respondents fully or somewhat disagree on this matter.

Regarding the evaluation of the implementation rules by the respondents, no significant differences exist between the two surveyed stakeholder groups; the Member States' representatives and EC officials. Nonetheless, Member States tended to express higher levels of agreement for the all of the implementation rules except for the sixth. EC officials expressed lower levels of agreement on the adherence to implementation rules but were also more likely than Member States' representatives not to have an opinion on them. For the EC officials, the 'Don't know / No opinion' was expressed by at least 19% (11) of respondents for all the six implementation rules, which is noticeably higher than for the Member States. In fact, the percentage of 'Don't know / No opinion' for Member States did not exceed 12% (5) for any of the implementations rules.

3.2.3 Allocation of financial resources

3.2.3.1 Funds Release Process

As mentioned in the previous section the Commission amends the rolling Work Programme (Work Programme revisions), at least once a year. Funds are released to the ISA action on the basis of the achievement of specific milestones:

- Inclusion of the action in the Work Programme, for the initiation of a study, an accompanying measure or the inception phase of a project;
- Delivery of the project charter, for the initiation of the execution phase of a project; and
- Delivery of the execution report, for the initiation of the subsequent operational phase of a project).

In this respect, each ISA action owner can decide to delegate the budget fully or partially to other Commission services.

Table 12 Funds released and withheld

ISA Work Programme	Date of adoption	Date of 1 st funds release	Δ (adoption and funds release; in days)	Released amount (m EUR)	Withheld amount (m EUR)
2010	08/07/2010	12/07/2010	3	25.5	1.2
2011 (1 st revision)	02/03/2011	08/03/2011	5	25.3	5.2
2012 (2 nd revision)	28/02/2012	13/03/2012	11	26.3	4.7
2013 (3 rd revision)	07/03/2013	14/03/2013	6	26 383	2 365
2014 (4 th revision)	24/02/2014	25/02/2014	2	24 857	1.31
2015 (5 th revision)	02/03/2015	04/03/2015	3	24.713 ⁴⁰	2.1

For each ISA Work Programme in the period 2010 - 2015, Table 12 shows the date of adoption of a new Work Programme and date of first funds release after the adoption, as well as the total released amount for each Work Programme revision. The last column of this table indicates the withheld amounts that were subsequently released. The first release of funds occurred, in average, five working days after the adoption of the Work Programme (with significant deviation observed only for the adoption of the second revision of the ISA Work Programme 2012). Since

⁴⁰ The released amount is the amount available for year 2015.

2012, the funds release time has been primarily on a decrease. Overall, the funds release process can be considered as working smoothly with no significant delays.

A slight deficiency was highlighted by one of the stakeholders. The use of the programme's funds would be more efficient if the time schedule of the release of funds would occur earlier in the year. Currently, the funds for the respective year are released at the end of February or at the beginning of March. The situation could be improved if the ISA Work Programmes would be adopted earlier then, as a result, would provide reassurance on the availability of the funds earlier in the year. However, considering that the Work Programmes are reviewed on a yearly basis, the evaluation accepts that end of February is the earliest possible time for the release of funds considering that the execution of the budget of the previous year has to be presented to ISA Committee members before submitting a new revised Work Programme for their approval.

3.2.3.2 Budget allocation and execution

According to Article 17 of the ISA legal decision, the financial envelope for the implementation of the ISA programme for the period from 1 January 2010 to 31 December 2015 is equal to EUR 164.1m, of which EUR 103.5m is for the period from 1 January 2010 until 31 December 2013. Accordingly, the allocated budget for the period from 2010 until 2013 was equal to EUR 103.25m with executed amount of EUR 103.47m (EUR 0.03m less than the amount of the financial envelope foreseen for this period).

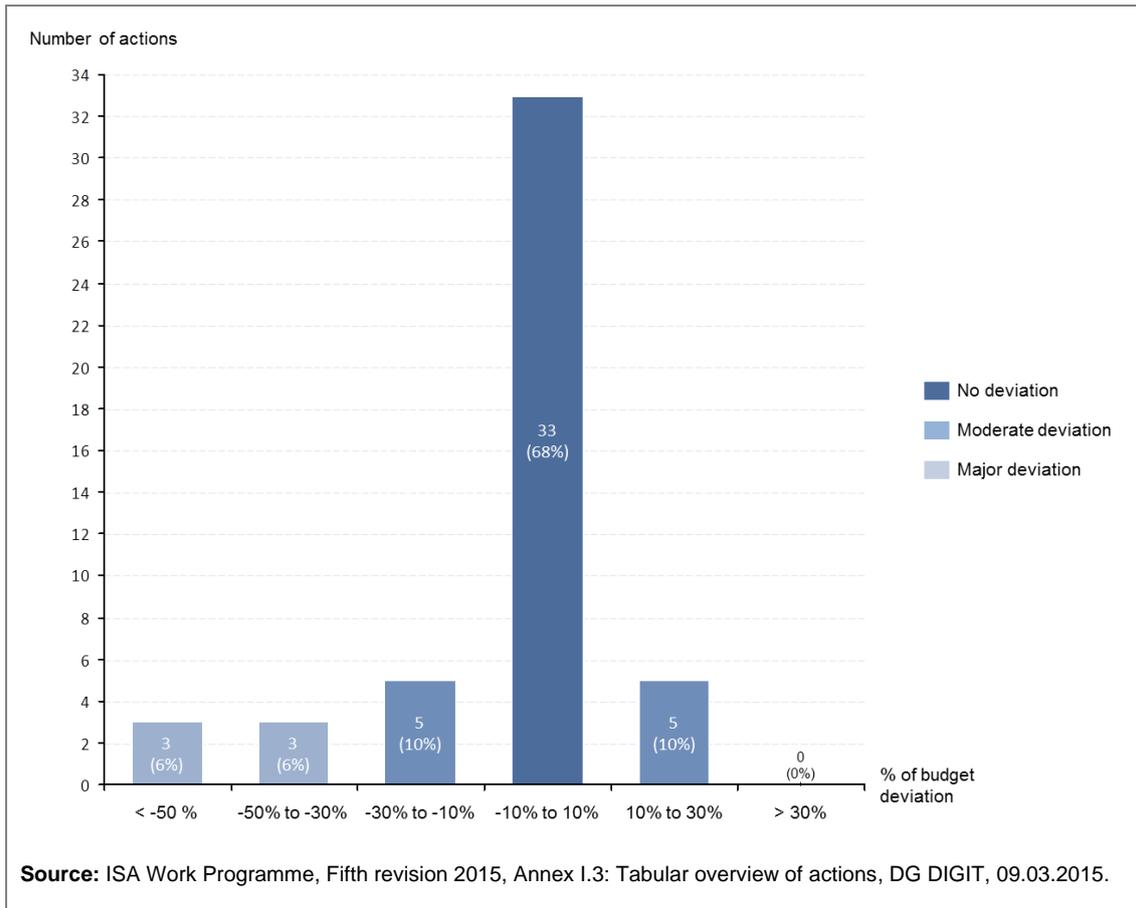
The Annex of this report provides a tabular overview of the ISA actions including the annual allocated budget for 2010 - 2015 and the annual executed budget for 2010 - 2014. The evaluation also verifies the percentage of budget executed versus allocated for years 2010 - 2014. The total executed budget for Work Programme 2010 – 2014 is equal to EUR 128.2m, therefore only slightly exceeding the allocated budget of EUR 127.4m by less than 1 per cent (0.63%). The evaluation confirms that the allocated budget, set at less the amount of the financial envelope, does not mean that it exceeds the financial envelope allocated to the programme. Other than that, almost the same number of actions executed less and more of the budget than was allocated (22 vs. 20 actions respectively) with seven actions executing the exact amount of allocated budget. Even though the overall executed budget almost matches the allocated one, it is also useful to analyse the budget deviations⁴¹ on a per action basis.

Figure 9 shows the budget deviations of the 49 actions included in the ISA Work Programme 2014. The evaluation team observed that most of the actions (i.e. 33 out of 49) have no significant deviations from their allocated budgets with deviations between -10% and +10%. In

⁴¹ Budget deviation is calculated as the difference between the allocated and executed budget.

addition, 10 actions incurred only moderate deviations (i.e. with executed budgets varying from -10% to -30% or from 10% to 30% compared to the allocated ones). Overall, the budget allocation can thus be considered as adequate since it appears that the budget forecasts are in line with the actual costs.

Figure 9 Overview of ISA action's budget deviation⁴²

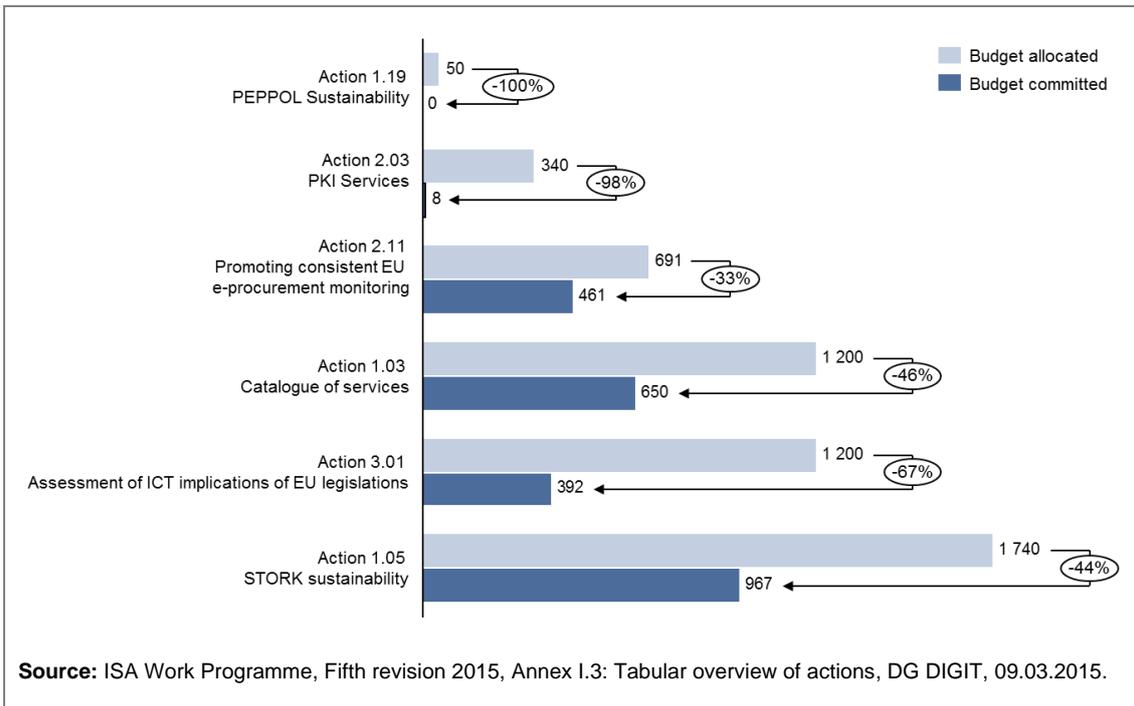


It is worthwhile to note that six ISA actions had major budget deviations, with their expenditures being significantly lower than their allocated budgets, whereas there was no ISA action with expenditure significantly above its allocated budget.

The aforementioned six actions are the following (listed in order of deviation from highest to lowest):

⁴² Based on the information from the Work Programme 2015.

Figure 10 Overview of the 6 most significant ISA action's budget deviation⁴³



The evaluation team contacted the responsible Project Officers (within or outside the ISA unit in order to investigate the reasons for these budgetary deficiencies. Often, these variations occurred due to administrative proceedings. For example, actions 1.03, 1.05 and 1.19 were not able to commit the budget because they were setting their objectives or have undergone major reorientation of the objective or scope that delayed the need for commitment of the budget; this has automatically translated into the levels of deviation mentioned above.

The budgetary deviation of the action 2.03 PKI Services is explained by the nature of the action itself. The key purpose of the action was to establish a contract service with a PKI provider for a purchase of PKI certificates by all the European Institutions. The allocated budget was, therefore, meant to fund the establishment of this Local Registry Infrastructure (LRA) by equipment of each DG. The total number of DGs that expressed interest was, however, low and therefore overall 98% (332k EUR) of the allocated budget was not executed.

Organizational issues prevented timely use of the budget, i.e. the allocated budget of action 2.11 (200k EUR) was not executed due to a major delay in the delivery of the initial study⁴⁴ that was conducted with the budget allocated in 2011. The allocated budget of 2012 was not committed as the delayed study of year 2011 was still being conducted and financed with the

⁴³ Based on the information from the Work Programme 2015.

⁴⁴ This initial study aimed at defining an approach to monitor EU e-Procurement.

allocated budget of year 2011. Further delays were caused by the study as it only concluded at the end of July 2013. The budget initially allocated in 2013 was thus similarly transferred to the following year (2014).

The budget deviation of the action 3.01 Assessment of ICT implications of EU legislation is rather explained by a change in the scope of the action. The objective of the action, which is to ensure that ICT implications of EU legislation are taken into account in due time to allow timely, efficient and effective ICT support for the implementation thereof, has remained the same over the years. However, the means to ensure that ICT assessments are performed, when necessary, significantly changed in 2013.

As mentioned in the ISA Work Programme 2nd revision 2012, before 2013, the action aimed at (i) testing the existing method on real-life cases with Commission services being in the process of drafting legislation (2010 – 2012); and (ii) offering it to all Commission services from 2012. Although this method was indeed offered to numerous DGs in the period of 2010-2012, none of them came forward to test this method on their legislative drafts. The budget allocated in 2010 was thus partly executed (EUR 42k out of EUR 150k were committed to finalise the method developed under the IDABC programme) and the budget related to 2011 (EUR 400k) and 2012 (EUR 300k) not executed at all.

In 2012, the ISA unit realised the need to (i) drastically review the existing method, perceived as too complex; (ii) support the Commission services performing this assessment by making a pool of resources (ICT experts) available to them; and (iii) promote the method and the service within the European Commission. The budget allocated in 2013, 2014 and 2015 was fully executed to serve these activities: a new ICT assessment method, which was released in July 2015, based on the lessons learned from three real-life cases, is currently being tested on three other real-life cases.

In parallel, efforts were made to ensure that ICT assessments become part of the EU Policy cycle. The importance of assessing ICT impacts of EU legislation is now highlighted in the Better Regulation guidelines⁴⁵ and the process to assess the ICT impacts of EU legislation referenced in the Better Regulation Toolbox⁴⁶.

⁴⁵ SWD(2015) 111 final, Commission Staff Working document, Better Regulation guidelines, Chapter III Guidelines on Impact Assessment (COM(2015) 215 final; SWD(2015) 110 final), European Commission, Strasbourg, 19.5.2015.

⁴⁶ Better Regulation 'Toolbox', complementing the Better Regulation Guidelines presented in in SWD (2015) 111; Tool #23: ICT assessment, the digital economy and society, European Commission, Strasbourg, 19.5.2015.

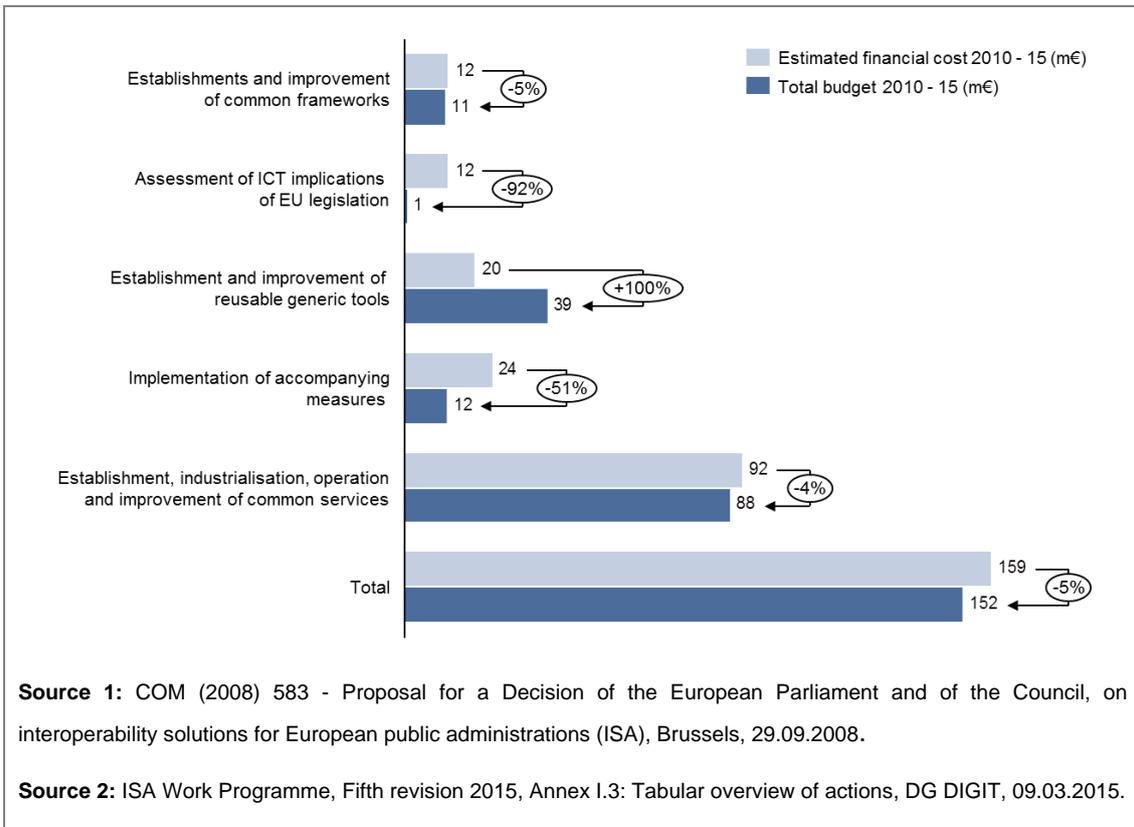
In order to verify whether the ISA budget is efficiently distributed across each type of ISA activity, the evaluation also compares the initial estimates from the legislative proposal for a decision on ISA⁴⁷, with the executed budget for the period 2010 - 2015.

As shown in Figure 11, overall, the total executed budget and the estimated financial costs do not vary significantly with negative difference between the two of approximately 5%, which amounts to EUR 7.788m. Even though the overall picture does not clearly show a large difference, more striking differences are shown within the respective types of activity.

There are in fact several types of activity that record a significant difference between the total budget and estimated financial cost; for example the Establishment and improvement of reusable generic tools records a difference of around 100%, meaning that the budget executed for this type of activity was doubled compared to the estimated costs from the legislative proposal). Another striking case is the difference between the total budget and estimated financial cost related to the Assessment of ICT implications of EU legislation (solely action 3.01) where, out of an estimated financial cost of EUR 12.000m, EUR 11.058m less has been budgeted for the period of 2010 – 2015. It represents a variation of -92% between the estimated financial cost and the total budget allocated to this type of activity. In the first ISA Work Programme, the allocated budget foreseen for this type of activity was already reduced to EUR 2.250m. This allocated budget was not fully executed primarily because the first results of the pilot with some Commission's services were not satisfactory and in line with the expectations. The orientation and therefore the scope of the action 3.01 had to be redefined as mentioned earlier in this sub-section.

⁴⁷ COM (2008) 583 - Proposal for a Decision of the European Parliament and of the Council, on interoperability solutions for European public administrations (ISA), Brussels, 29.09.2008.

Figure 11 Total budget⁴⁸ and estimated financial cost⁴⁹ for the period 2010 – 2015



With regard to the adequacy of the allocation of financial resources, Member States' representatives and EC officials were asked to give their opinion on whether the results of the ISA programme could have been achieved with less budget. Out of a total of 98 respondents, 50% (49) did not express any opinion on this matter, due primarily to a lack of overall view of all of the ISA actions. However, out of the 98 respondents who could have expressed an opinion, 33% (32) believed that the current results of the programme could have been achieved with less budget. 28 respondents provided us with further justifications to their opinions: the current results are not high enough compared to the budget spent (25% (7/28)).

The budget allocated to sTESTA is too high compared to the overall budget of the programme and should have been reduced ((14% (4/28)). The evaluation confirms that almost 70% of the budget of this activity is allocated to action 2.04 Data Communication Network Service (sTESTA). It is also important to mention that the budget allocated to this specific action is equal to 36.7% of the total allocated budget of the ISA programme.

⁴⁸ Total budget is the sum of the executed budget for 2010 – 2014 with the allocated budget for 2015.

⁴⁹ Estimated financial costs are represented by the annual estimated financial costs as mentioned in the legislative proposal for each ISA activity.

65% believe nevertheless that the current results of the ISA programme could not have been achieved with less budget. This majority of respondents indirectly acknowledges that the allocation of budgetary resources was adequate as a result of this analysis. The evaluation team also verified the adequacy of the budgetary resources to cover the entire scope of the ISA programme. First of all, it is worth noting that out of 47 responses 21% of respondents (10) did not express an opinion on this matter and 19% (9) were indifferent in their response by choosing neither to agree nor disagree on the adequacy. This can be linked to the lack of knowledge or general overview on the programme.

Furthermore, 55% (26) of those who responded fully or somewhat agreed that the budgetary resources were adequate to cover the entire scope of the ISA programme. Furthermore, only two respondents somewhat or fully disagreed on the adequacy of the budget of the ISA programme; representing 4% of total responses.

One of the obstacles preventing the respondents from answering was their lack of knowledge or of a general overview. Therefore, the evaluation team directly questioned the Project Officers for the respective ISA actions about their opinion on the adequacy of the budget's annual breakdown to achieve the desired results. 68% (13) of the Project Officers agreed upon the adequacy of annual budget splits, whilst only 16% (3) did not agree with this. The perception of the annual budget split was, therefore, rather positive; with minor comments from Project Officers who suggested that these budget splits have a tendency to reduce flexibility regarding their use or create a situation where budgets are being spent unequally between actions.

3.2.4 Allocation of human resources

As regards the efficiency of resources mobilised within the ISA unit, the evaluation is based on two main aspects:

- Distribution of human resources in function groups (administrators and assistants) to ISA unit activities and tasks in comparison to the distribution of resources given by the legislative proposal⁵⁰ and the different structures of the ISA unit available for 2010 - 2015 (i);
- Human resources allocation to total number of ISA actions, but also to the actions under the responsibility of DIGIT.B6, i.e. the ISA unit (ii); and
- Human resources turnover rates (iii).

i. The proposal for the ISA programme gives a tabular overview of the number of staff (Commission officials) to be assigned to the ISA unit by type of function group. Indeed, the posts covered by the Staff Regulations⁵¹ are classified in an administrators' function group (hereinafter 'AD') and an assistants' function group (hereinafter 'AST').

The AD posts should cover the actual management of the programme⁵², whereas the AST posts provide support to transversal and the rolling of the Work Programme activities⁵³. In addition, the AD posts also include the Head of Unit, the legal advisor to the programme and the secretariat of the Management Committee. In addition, the Seconded National Expert (SNE) posts support the actual management of the programme, complementing the AD posts mainly in areas related to coordination with the Member States, the follow-up of projects and studies and the organisation of expert meetings, workshops and conferences. The functions of a SNE can be regarded as equivalent to those of function AD.

Since April 2010, the ISA unit maintains and updates the structure of the ISA unit, i.e. allocation of the staff to the ISA unit activities. The structure of the ISA unit has been updated five times in

⁵⁰ Refer to section 8.2 Administrative Expenditure and to the COM (2008) 583 - Proposal for a Decision of the European Parliament and of the Council, on interoperability solutions for European public administrations (ISA), Brussels, 29.09.2008.

⁵¹ Article 5 of the Regulation No 31 (EEC), 11 (EAEC), laying down the Staff Regulations of Officials and the Conditions of Employment of Other Servants of the European Economic Community and the European Atomic Energy Community - (Regulation located in OJ P 45, 14.06.1962, p.1385).

⁵² The management of the programme includes the elaboration of the work programme, management of the work programme amendments and interim evaluation, management of the budget, management of the public calls for tenders associated with the execution of the programme, management of the contract associated with the execution of the programme, follow-up of projects and studies, coordination with the Member States and the other EU bodies, coordination with other Commission services, contacts with Commission services and Member State experts, organisation of expert meetings, workshops and conferences, and legal advice.

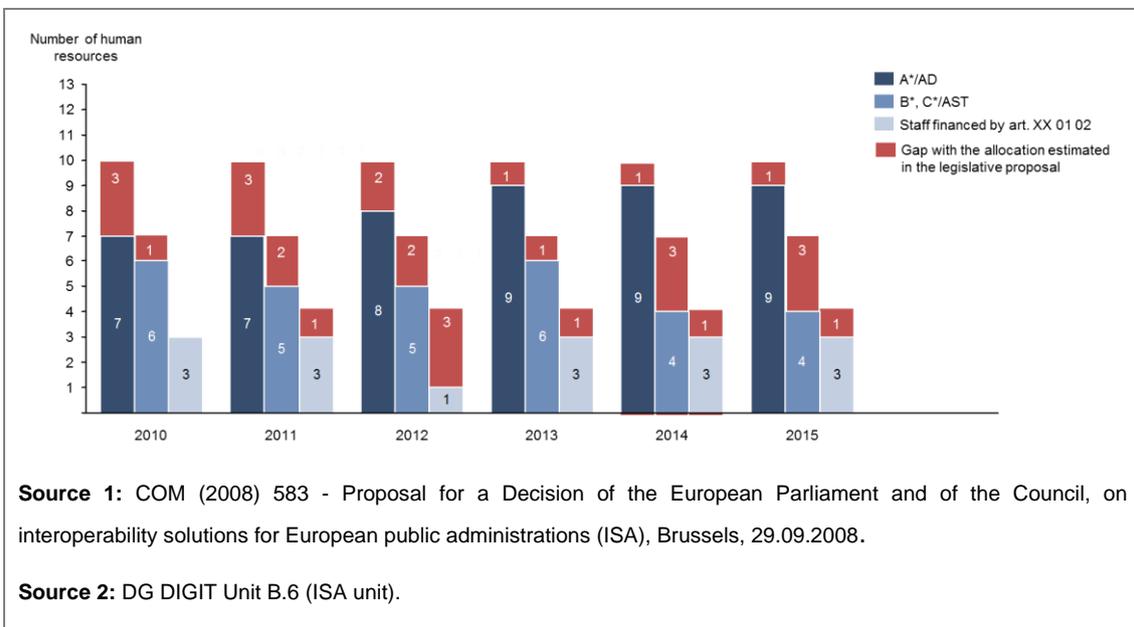
⁵³ These activities include secretarial tasks and organisation of missions (2 persons), budget management, calls for tenders, contracts and payments of invoices (2 persons), and information dissemination and communication (2 persons).

years 2010 - 2012, four times in 2013, three times in 2014 and the staffing rates remained unchanged since June 2014 for year 2015.

Each structure of the ISA unit includes activities divided in six categories: horizontal activities, finance and contracts, strategy, planning & reporting, coordination and ISA programme activities. The management of the ISA actions will be treated separately in the next part of this subsection.

Figure 12 compares the actual distribution of resources in different function groups to ISA unit activities and tasks since January 2010 until mid-2015, with those estimated in the ISA legislative proposal.

Figure 12 ISA unit activities and tasks by types of post

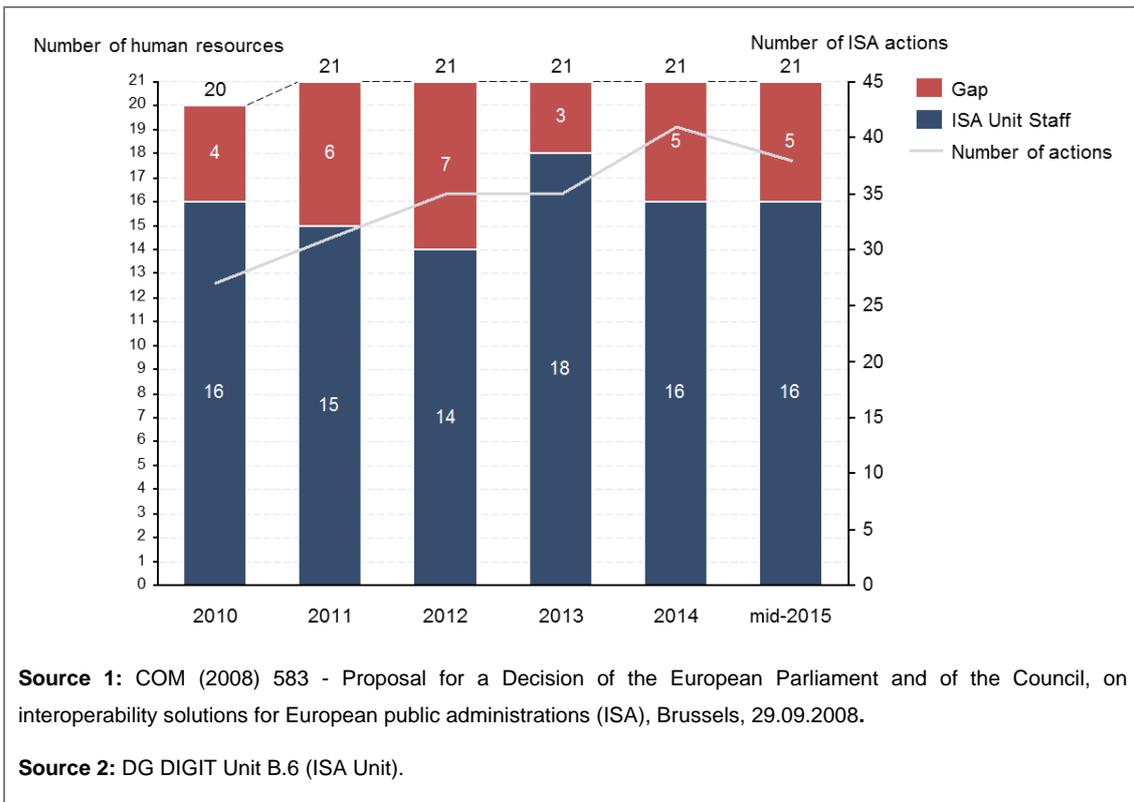


In the period 2010-2015, the distribution of resources in AD and AST groups is in line with the planned allocation from the legislative proposal. Therefore, it can be concluded that the allocated resources have the adequate skills to cover the actual management of the programme and other support activities. It shall be noted, however, that the number of the HR resources for each type of post has always been below the estimated number of the HR resources. Therefore, there has always been more workload per resource than what was foreseen at the time of the establishment of the programme.

ii. Another important aspect to evaluate is the increase/decrease in the number of human resources in the ISA unit (ISA staff) in the period from 2010 until mid-2015. This metrics should be evaluated against the number of human resources planned in the legislative proposal and the estimation of the ISA unit workload. In this respect, we consider the number of actions in the

ISA Work Programme as a proxy⁵⁴ indicator to measure the ISA unit workload. From 2010 to 2015, the number of ISA actions increased by 41% (11 additional actions⁵⁵, out of which seven have to be managed by the ISA unit); it is thus assumed that the workload of the unit has increased. In case when the new actions are managed by other Commission service (4 out of 11 new actions), the increase of the workload is then related to the support activities deriving from the actions (e.g. managements of contracts, payment of contractors, call for tenders, etc.); and to the fact that at least one resource of the ISA unit is allocated to the action follow up and supervision.

Figure 13 Number of HR allocated in 2010 - 2015⁵⁶



As shown in Figure 13, the number of human resources is less than the one planned in the legislative proposal for each of the years between 2010 and 2015. The increase in the number of ISA actions shall be reflected upon the number of ISA human resources; however it is not

⁵⁴ A proxy indicator is an indirect measure or sign that approximates or represents a phenomenon in the absence of a direct measure or sign.

⁵⁵ As regards to the changes in the Work Programme 2010 – 2015 where additional actions have been added on a yearly basis, as well as some actions (or their funding) has been discontinued.

⁵⁶ Since June 2014 there was no update on the allocation of human resources. In any case, the total number of allocated human resources remains 16 in 2015 that creates a gap of 5 human resources in comparison to the numbers of human resources from the legislative proposal.

being done so on a regular basis. Overall, the number of actions has been steadily increasing from 27 in 2010 to 38 in 2015. However, the number of ISA human resources has been growing only very slightly, creating thus an increasing pressure on the existing human resources within the Commission.

In total, there were 18 ISA actions under the responsibility of the ISA unit and 20 actions managed by other Commission services in 2015. After a consideration of the increase in the number of ISA actions over time in contrast to the less significant and unmatched increase in the ISA unit's human resources, the evaluation team remarks that current human resources of ISA unit are managing relatively higher number of actions over time than was envisaged at the time of the inception of the programme. The number of ISA actions under the responsibility of ISA unit has increased by 64 % (from 11 to 18) between 2010 and 2015, whilst the number of ISA human resources has only increased from 15 to 16⁵⁷ (representing approximately increase of 7%) during the same time frame.

iii. Having analysed the efficiency in terms of distribution of resources in AD and AST function groups and the allocation of resources to ISA activities and tasks, the evaluation team analysed the turnover of the ISA staff from the beginning of the programme. The retention of knowledgeable resources and a low rate of undesired replacements of resources are elements of prime importance to maintain a certain level of quality and keep the knowledge acquired during the lifetime of the programme. Leaving aside sectors in which continuously replacing resources is a need (e.g. highly innovative industries), the above statement is applicable to most of the sectors and therefore to the ISA unit as well.

In order to evaluate this criterion, the ISA unit turnover⁵⁸ in the period 2010-15 is evaluated to verify the qualitative aspect of its human resources⁵⁹. Table 13 shows the turnover of the ISA unit resources from January 2010 until mid-2015. It displays the number of resources at the beginning and end of every year (except 2015) of the unit. The highest turnover (43%) was registered in 2013 being significantly higher than any other registered turnover. From year 2013, the turnover rates have drastically decreased, reaching 0% in 2015 (as of mid-2015). Overall, the risk related to high turnover rates from the beginning of the programme has been reduced, even if the knowledge and experience gained from the previous programmes was only partially kept. However, the programme draws on the competences of a wide variety of Commission officials and Seconded National Experts, particularly dealing with technical, semantic and organisational interoperability, but less with legal interoperability issues. The aspect of legal interoperability has indeed not been really explored. In fact, the evaluation highlights that the

⁵⁷ Annual averages of ISA unit number of human resources.

⁵⁸ The turnover is computed as: $\frac{((\text{Number of new comers} + \text{number of leavers})/2)}{\text{number of in the preceding period}}$.

⁵⁹ The following type of human resources was used in our analysis: AD, AST and SNE.

focus was not on this aspect, primarily because of the investment that it represents compared to the aforementioned lack of resources.

Table 13 ISA unit resources - turn over in the period January 2010 to mid-2015

Work Programme (WP)	Start of WP total resources	Comers	Leavers	End of WP total resources	Turn over
2010	15	4	4	16	27%
2011	15	4	5	15	28%
2012	15	4	6	14	33%
2013	13	8	4	15	43%
2014	15	1	0	16	3%
2015	16	0	0	16	0%

3.2.4.1 *Perceived efficiency of the allocation of HR*

Overall, 47% (22) of respondents fully or somewhat agreed that ‘the allocation of human resources from the European Commission is adequate to ensure a smooth delivery of the ISA actions’. However, the EC officials and Member States’ representatives vary in their opinion on this statement even though it is important to acknowledge the difference in the absolute numbers of EC officials (6) and Member States’ representatives (41) who responded to this question. Whilst 52% (21) of the Member States’ representatives fully or somewhat agreed with the statement, only 17% (1) of the EC officials agreed that the allocation of human resources from the European Commission is adequate to ensure a smooth delivery of the ISA actions. Furthermore, 22% (2) of the EC officials fully or somewhat disagreed with the statement, whilst only 13% (4) of the Member States fall into this category.

The results of open-ended questions revealed the reasons for the perceived higher level of adequacy of the budgetary allocation than the human resources allocation. Most of all, EC officials and Member States’ representatives shared the view that the ISA unit seems have less human resources than it requires in order to ensure the smooth delivery of the ISA actions. Secondly, the human resources allocation tends to reflect the budgetary allocation of the ISA actions more than their human resources’ need. Thirdly, the EU practice of staff rotation seemed to have affected the ISA unit’s operations. Some responses also suggested an inadequate amount of human resources within Member States’ administrations to deal with interoperability matters.

3.2.5 Overall performance of the programme

3.2.5.1 Time efficiency at action level

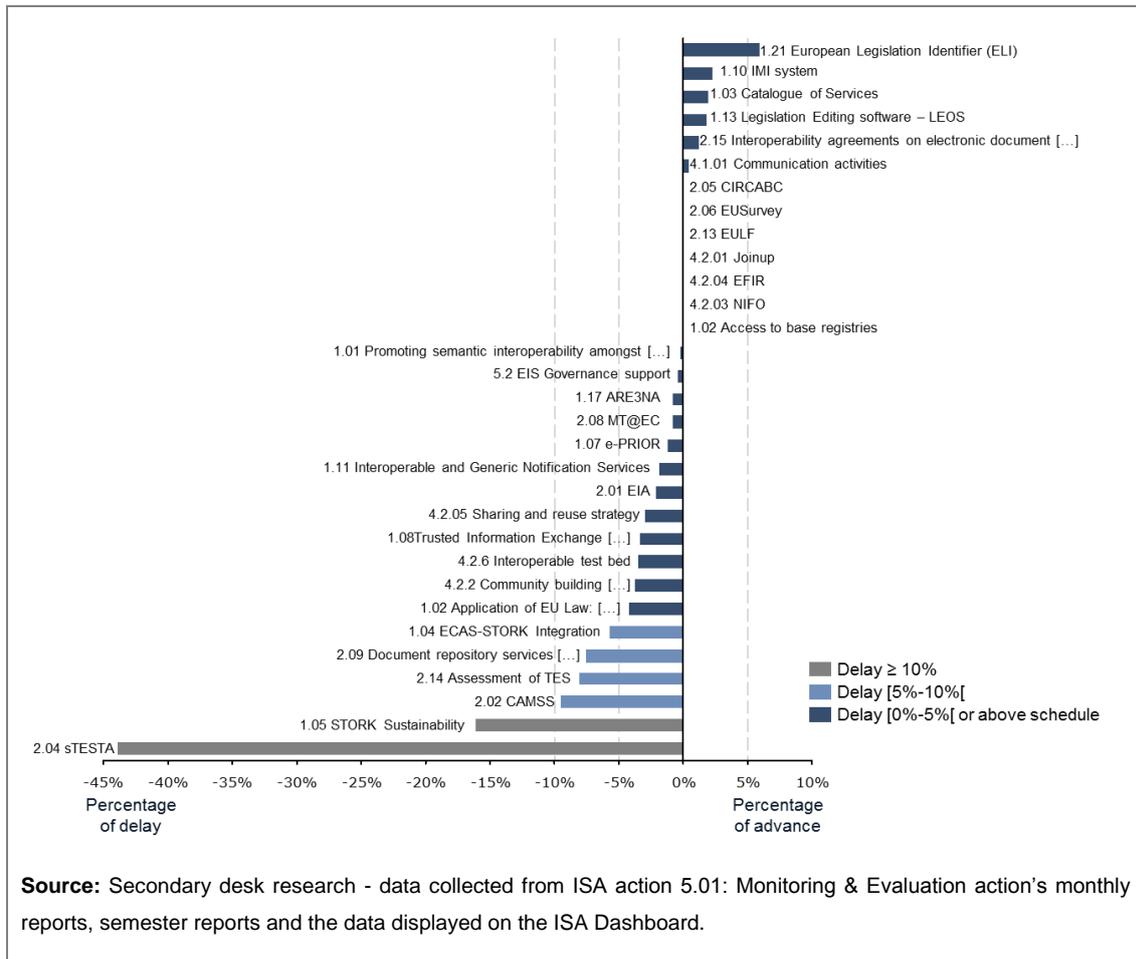
In the framework of the monitoring of the ISA programme, efficiency is measured at action and programme level. In this regard, two techniques are being used - the Earned Value Management (EVM) and Earned Schedule (ES) techniques. EVM is a systematic approach to the integration and measurement of cost, schedule and technical (scope) accomplishments of an action and its related pieces of work (i.e. milestones). ES is an extension of EVM, given that it completes the EVM approach by going deeper into performance in a time perspective⁶⁰.

In order to verify whether each ISA action has been progressing to schedule within the ISA programme, the evaluation has calculated how their progress compares with their schedule between 2011 and 2015⁶¹, as detailed in the Annex. Figure 14 below provides the status of all the ISA actions, in terms of percentage of delay/ advance based on their status in May 2015. It should be noted that the delay/advance value is calculated based on the schedule variance of the action, i.e. the difference between the earned value of the work performed and the planned value of the work scheduled.

⁶⁰ Evaluation techniques as mentioned at the ISA Dashboard dedicated website.

⁶¹ Data collected from the Monitoring & Evaluation action (ISA action 5.01) included monthly reports, semester reports and the data displayed on the ISA Dashboard. Action 5.01 – Monitoring and evaluation started at the end of 2010 that explains the lack of analysis for the preceding period. As May 2015 is the latest month (at the time of this evaluation) for which the contractor in charge of the monitoring activities has reported the efficiency of the actions, May 2015 is the reference point around which efficiency data has been compared over the period.

Figure 14 ISA actions delayed and ahead of schedule



Actions not included in Figure 14, are actions for which data could not be reported at the concerned period, for the following reasons:

- Data were not provided to the contractor in charge of the monitoring of the programme;
- No contract was running in May 2015;
- Funding of the action had concluded by May 2015.

As further detailed in the Annex, the majority of actions have been progressing to schedule over the years. Even though there have been some slight delays, overall they have occurred only occasionally and the actions were back on track the following year. The issues related to these delays always managed to be resolved and the risks were mitigated.

However, as depicted in Figure 14, at the end of May 2015, the following two actions had a significant delay (greater than 10% of their total duration):

- Action 1.05 – STORK Sustainability: The original eIDAS version of the PEPS, which aimed to be deployed in September 2015, will only be compatible with the Member States that are eIDAS compatible by this date. As no Member States aims to be eIDAS

compatible by this time, DG CNECT decided to postpone the deployment (delaying the progress of the action). At the time of this report, the development team is awaiting specifications from Germany and Austria.

- Action 2.04 – Data communication network service (sTESTA / TESTA NG): The time needed to perform some tasks on the new TESTA NG network was underestimated (e.g. encryption), delaying other dependent tasks, such as the testing, but also the roll-out and actual migration of the current operational sTESTA network to TESTA NG. As a result, the current sTESTA network needs to be kept in operation for longer than expected.

In comparison to the total number of actions in the ISA programme (51); having only two significantly delayed actions may appear to be insignificant. One should however take into account that action 2.04 represents almost one third of the overall budget of the ISA programme (59,043 million EUR). Although the sTESTA contract ended in Q3 2013, a migration period of more than 18 months starting in 2013 was foreseen due to the complexity of the provided services and the multiple communities that are served. During the migration period, the continuity of the current sTESTA services had to be guaranteed. Therefore, critical service elements of sTESTA and its successor, TESTA-ng, have to coexist. The financing that is required for this parallel operation was already budgeted in previous work programmes. At the time of writing the final report, a new project schedule is being finalised to address the issues encountered by this action. Greater clarity on this will be available from autumn 2015.

3.2.5.2 Time efficiency at the programme level

Overall, from a time perspective, the progress of the ISA actions can be considered as efficient as of the end of May 2015, however it is beneficial for our final judgement to also focus on the time efficiency of the programme overall.

Before analysing the programme time efficiency, mostly based on Earned Schedule metrics, the two following points should be noted:

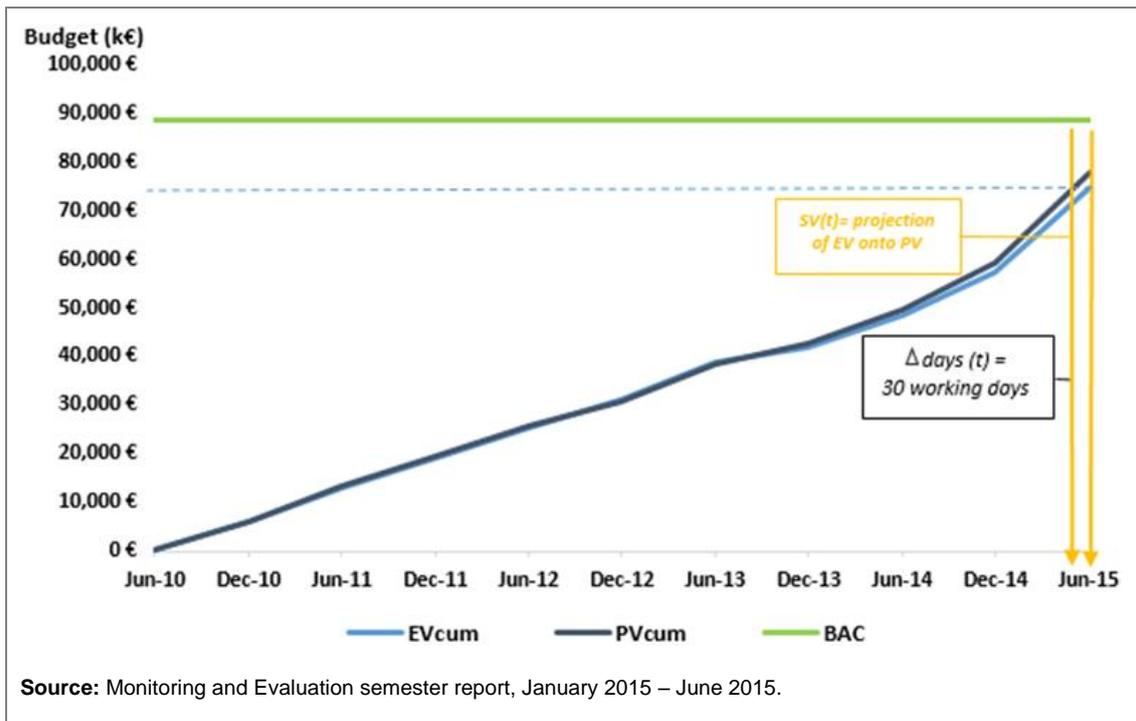
- Given the non-exhaustive number of actions in the scope of the programme aggregation (42 actions out of 51), one should keep in mind that the results displayed in this part of the final evaluation are only indicative and do not represent the progress of the entire ISA programme.
- The information included below is based on the last Monitoring & Evaluation semester report (January 2015 – June 2015). In this regard, the latest data available at programme level is as of the end of June 2015.

The evaluation technique aims to compare the actual value produced by the programme (Earned Value (EV)) and the value initially forecasted until the end of June 2015 (Planned Value (PV)). In this regards, when comparing EV (EUR 76,663k) with PV (EUR 79,725k) at the end of June 2015, and taking into account a Budget at Completion (i.e. sum of the budgets of all the

ISA actions monitored using EVM) which is around EUR 88,590k; the delta (EUR -3,062k) can be considered as minor from a value perspective. In order to delve deeper into the evaluation of the ISA programme's performance, the impact of this delta was measured in terms of time.

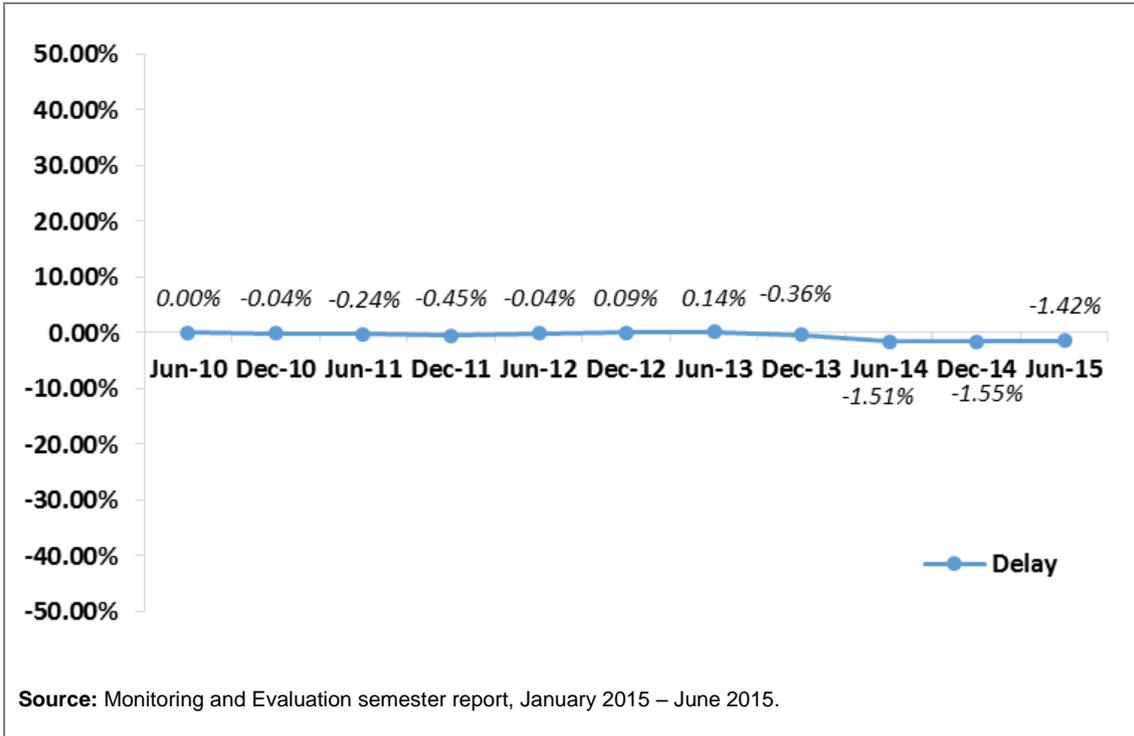
Figure 15 introduces the Schedule Variance (SV) indicator, which aims to measure whether the work accomplished is ahead or behind schedule (in number of days).

Figure 15 ISA programme efficiency: Schedule Variance



The EUR -3,062k delta represents, in terms of time, a delay of 30 working days. Put into perspective with the length of the ISA programme (Figure 16), this delay represents less than 5% of the programme's duration. Therefore, it can be considered as minor (see time scale in the preceding part of this subsection). In addition to that, it can be seen in Figure 16 that the programme's progress has always been on track. Overall, from a time perspective, the progress of the ISA programme can thus be considered as efficient, as of the end of June 2015.

Figure 16 ISA programme efficiency: % of delay



3.2.5.3 Perceived performance of the ISA programme

First of all, the evaluation team investigated whether the interview and survey respondents believed that the programme was on track. Almost 69% (67) of respondents agreed that the ISA Programme is on track, whilst only 4% (4) of respondents did not agree that this was the case. A large part of respondents (27% (26)) did not have a clear view on this issue. It is clear that, even though there are several ways in which to improve the overall performance of the programme, in general, it is perceived to be on track.

Further analysis revealed that 90% (42) of respondents fully or somewhat agreed that the ISA programme has been delivered within its original scope (stated by all EC officials (6) and by 88% (36) of the Member States' Representatives).

Just 23% (23) of respondents stated that the current results of the ISA programme could have been achieved faster whereas 34% (33) of respondents did not agree with this viewpoint and a large portion (43% (42)) of respondents did not have a clear opinion on the pace of the process. Furthermore, the respondents have a tendency to explain the slower pace by the overall structural reality of the EU. European public administrations operate in a deliberative fashion and need to respect procedures and protocols of coordination in order to work together to produce results. This reality often constrains the pace of developments of programmes. At EU level, this reality is particularly acute. Coordination of 28 different Member States and the different entities of the EC were widely recognised by interview and survey respondents as

major challenges that naturally slow the pace of the programme and, consequentially, the rate at which it can produce. Member States' representatives voiced their own national experience of where institutional reality affects the pace of policy programmes. Furthermore, this was compounded by changes of personnel, institutional re-organisation programmes and the arrival of new political administrations/ governments.

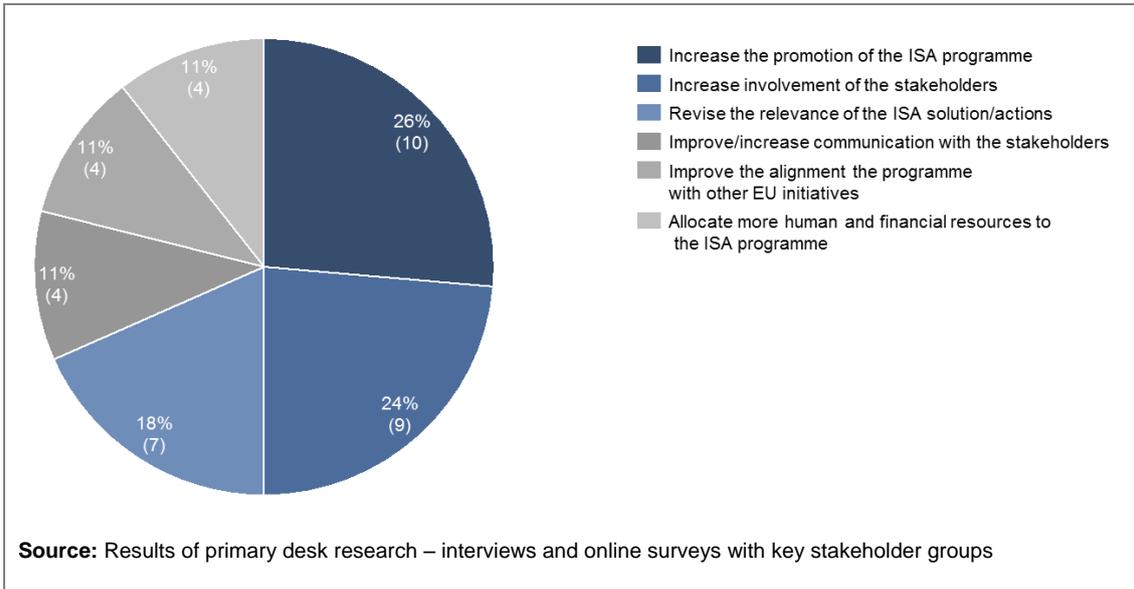
In order to further investigate the timeliness of the programme, several Project Officers had a chance to share their experiences of the delays with actions under their purview. While a few of them did not experience any delays, most of them did. The reasons for the occurrence of delays were often related to the nature of the solution/action. Often, the key reason for delay was rooted in the inability to communicate with all of the relevant stakeholders (such as other DGs, Member States or Commission's contractors) or the existence of administrative barriers that delay the process (e.g. acceptance process of deliverables and other specificities of EC's internal processes). Overall weaknesses in the coordination between key stakeholders was also frequently mentioned reason for delays.

17 Project Officers also provided us with a range of reasons to explain any of the deficiencies in the overall performance of the action under their purview. Lack of awareness, communication and engagement of the interested parties (often the Member States) occurred most often in the responses of the Project Officers (6). Lack of focus of the programme resulting from too many actions is another reason for the deficiencies in the performance mentioned by two respondents. Budgetary resources were once again not the key issue, and the focus was much more on the lack of skills, competences or expertise at both EC and Member State level.

Having analysed perceptions regarding the ISA programme's performance, the evaluation verified suggestions from the respondents for improvement of the ISA programme, Overall, 62% (61) of respondents ((Member States' representatives and EC officials)) confirmed that there are measures to improve the overall performance of the programme.

Figure 17 provides a summary of the most frequently desired suggestions for improvement. The most frequently suggested measure was to increase the promotion of the ISA programme (10 occurrences), followed closely by the need for greater involvement of the stakeholders (9 occurrences) such as Member States as well as citizens, businesses and other DGs at various stages of the ISA programme. Third most frequently recommended measure was a need for revision of the relevance of the ISA solution/actions, including stricter criteria for the inclusion of new actions (7 occurrences). Several further measures were suggested, i.e. to improve/increase communication with the stakeholders (4 occurrences), to better align the programme with other EU initiatives (4 occurrences) or to allocate more human and financial resources to the ISA programme (4 occurrences).

Figure 17 Most frequently mentioned measures to improve the ISA programme



3.2.6 Conclusions

The following box summarises the main findings related to EQ2: ‘How economically were the various inputs converted into outputs?’ and EQ3: ‘Which aspects of the programme were the most efficient or inefficient, especially in terms of resources mobilised?’.

Conclusion N°4

Based on the evidence provided by action 5.01 Monitoring & Evaluation, the evaluation judges the progress of the ISA programme as efficient. With an overall delay lower than 5% of the programme’s total duration (30 working days), the programme has been considered as on track during the whole 2010-2015 period. The progress of each individual ISA action can also be considered as efficient as the large majority of the actions have a delay⁶² **of less than 5%**.

In addition to this evidence, 90% of **surveyed Member States’ representatives and EC officials** affirmed their view that the programme has delivered on time and also within its original scope. A majority **of these stakeholders (68% of Member States’ representatives and 58% of EC officials)** felt fully or somewhat involved in the annual revisions of the ISA programme.

Given that the programme should have followed specific implementation rules to ensure its smooth implementation, the evaluation judges this aspect as satisfactory as well. Once again, the perception of respondents of the ISA programme’s adherence to its implementation rules is aligned with the data that confirms the overall efficiency of the programme.

⁶² The difference between the earned value of the work performed and the planned value of the work scheduled.

Conclusion N°5

The following aspects of the ISA programme can be regarded as efficient by the evaluation:

- Selection procedure of proposals for new actions: It is considered appropriate as the ISA actions selected for funding comply with the overall objectives of the programme to support the interaction between administrations with the exception of EUSurvey.
- Funds release process: It is judged as efficient given that the first release of funds occurs, on average, five working days after the adoption of the Work Programme.
- Allocation of budgetary resources: Overall, budgetary resources were adequate to cover the entire scope of the ISA programme.

On the other hand, the ISA programme can be regarded as less efficient in the following aspects:

- Precision and clarity of the documented process about the selection of proposals for new actions: The evaluation found that the stakeholder involvement in the consultations with ISA was considered satisfactory and there was generally a correlation between the level of involvement of Member States in the selection of proposals and their levels of satisfaction with this process. However improving the precision and clarity of the documented process about the selection of proposals, as indicated by the proposal for the ISA² programme, would improve its efficiency and transparency⁶³. Member States also recognised that internal issues within national and local administrations can hinder their capacity to be involved in and fulfil their obligations with regard to the process.
- Allocation of human resources: The allocation of human resources in the European Commission has always been lower than what was foreseen in the ISA legislative proposal⁴⁷. However, the evaluation recognises that the ISA programme is subject to the general contraction of staff levels as part of the EC's 5% staff reduction target by 2018⁶⁴. A wide variety of Commission officials and Seconded National Experts are dealing, in particular, with technical, semantic and organisational interoperability, but less with legal interoperability issues. The programme has, indeed, not yet focused much on the aspect of legal interoperability.

⁶³ COM(2014) 367 final, Proposal for a Decision of the European Parliament and of the Council establishing a programme on interoperability solutions for European public administrations, businesses and citizens (ISA² Interoperability as a means for modernising the public sector. The evaluation notes that the proposal for the ISA² programme makes reference to fact that *'the inclusion of actions in the rolling work programme shall be subject to compliance with a set of rules and admission criteria before being included in the rolling work programme. Those rules and criteria and any amendments thereof shall be an integral part of the rolling work programme.'*

⁶⁴ 'EU Commission proposes 5% staff cut over 5 years in EU agencies', European Commission: DG BUDGET, Brussels, 11.07.2013.

3.3 Effectiveness

The evaluation of the effectiveness of the ISA programme is driven by the following evaluation questions:

EQ4: To what extent did the ISA programme's results and impacts achieve its objectives?

EQ5: Are there aspects that were more or less effective than others, and, if so, what lessons can be drawn from this?

To evaluate the extent to which the ISA programme's results and impacts achieve its general and specific objectives, the evaluation looks at the expected results for each programme's activity based on both ISA legal decision and the ex-ante evaluation of the IDABC follow-on programme. The latter provides clear expected results for each of the specific objectives of the programme, which are its activities to be supported and promoted, as stipulated in Article 3 of the legal decision.

In addition to the establishment of new solutions, the scope of programme's activities also covers existing solutions established under the IDA and IDABC programmes, which came to an end on 31 December 2009. For this reason, the evaluation of the programme's activities provides an overview of these carried forward actions for each programme's activity. A tabular overview of the actions carried-forward from IDA and IDABC including details on the budget for each action within the IDABC and IDA programmes, the corresponding activity for each ISA action and the IDABC action type as well, can be found in the Annex.

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ4 and EQ5.

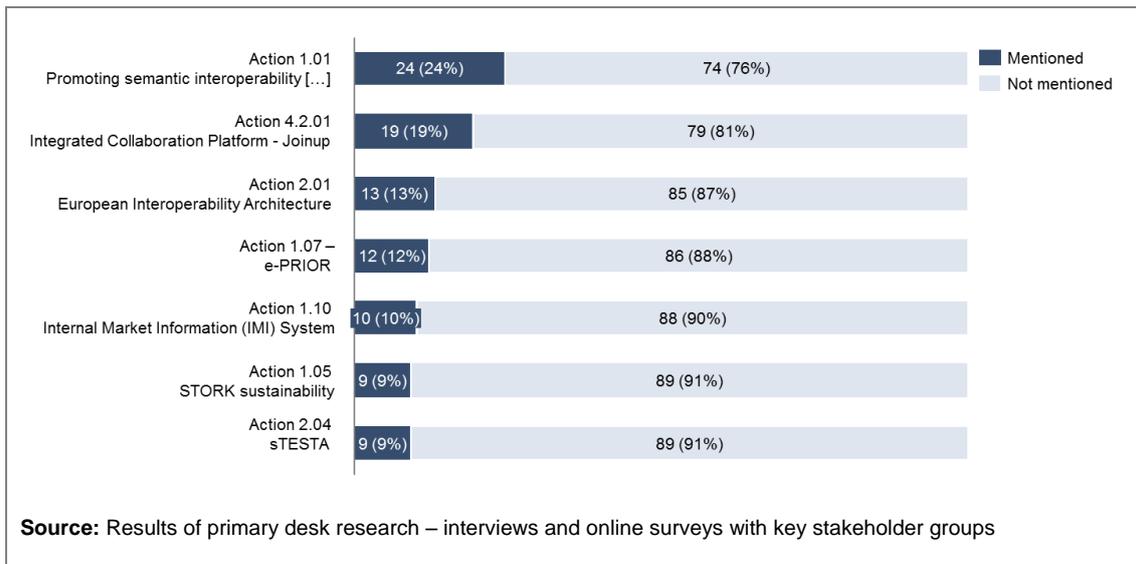
3.3.1 Facilitation of effective interaction between European public administrations

Solutions established or operated under the ISA programme should achieve the important results of facilitating interaction between European public administrations, which is the main objective of the ISA legal decision, as stipulated in its Article 1.

Before looking at the results delivered by the ISA programme in practice, the evaluation team verified the level of awareness of the ISA programme's results from the interviewees and respondents to the surveys. They were requested to express their opinion on what they considered as the main results of the ISA programme. This is along the lines of the interim evaluation of the programme that confirmed a low level of awareness and visibility of ISA programme's results.

Many Member States' representatives and EC officials named the results of several specific actions as the main results of the programme. In that regard, Figure 18 presents the most commonly cited actions in descending order based on the number of times that they were mentioned as a main result by the respondents. The evaluation confirms that the work on semantic interoperability, Joinup, and the European Interoperability Architecture are "perceived" as the top three main results of the ISA programme.

Figure 18 Main ISA results perceived⁶⁵



In addition, 11 interview and survey respondents said that the existence of the ISA programme itself, as a means to better raise awareness about the importance of interoperability, was the main result of the programme. Also, the European Interoperability Framework (EIF) was cited ten times by the respondents. Although developed under the IDABC programme, ISA Action 4.2.3 National Interoperability Framework Observatory (NIFO) actively supports the implementation of the EIF at Member State level, through the transposition of the EIF into national interoperability frameworks. It can be deduced, therefore, that the support provided by the programme to Member States on the EIF implementation is a major result of the ISA programme.

The level of alignment of the results delivered by the programme with the expectations from respondents was also assessed. In this regard, out of 76 answers from respondents expressing

⁶⁵ It is also worth noting that the 2015 First Semester Monitoring & Evaluation Report, based on another survey of nominated users and beneficiaries of each action, rated the utility of E-TrustEx (action 1.8); OSS-ECI (action 1.12) very highly, as section 3.4 shows.

their opinion, these results are aligned with their expectations for a clear majority, namely 83% of them, and not aligned for the remaining 17%.

Based on the identified results, respondents were asked to assess how well the ISA programme has facilitated efficient and effective cross-border and cross-sectoral interaction between European public administrations. Out of 77 respondents expressing an opinion on this matter, a majority judged that the programme has well (66%) or even very well (5%) facilitated an efficient and effective cross-border and cross-sectoral interaction between European public administrations. Only 3% expressed the opinion that the programme has quite poorly facilitated this interaction whereas 26% believes that it has neither well nor poorly facilitated it.

Even if less frequently mentioned by respondents, the programme has delivered other significant results facilitating effective collaboration between European public administrations. In that regard, the evaluation went beyond the pure perceptions from end-users (which are important for measuring the levels of awareness on interoperability and on the programme itself) and identified the key results delivered by the programme in terms of ISA solutions established, operated or further improved since IDA, IDABC in the period 2010-2015, as shown in Table 14.

Table 14 Operational ISA Solutions

ISA Solutions ⁶⁶	Description
1. The Internal Market Information System (IMI)	A multilingual online tool that facilitates the exchange of information between public administrations across Europe involved in the practical implementation of EU Law ⁶⁷ .
2. Open e-Prior	An open-source e-Procurement solution, which covers the whole post-awarding cycle of e-procurement: e-Catalogue, e-Ordering, e-Fulfilment and e-Invoicing.
3. EUSurvey	A free, open source and easy-to-use tool for the creation and management of multilingual surveys and public consultations over the web.
4. Joinup	A collaborative platform containing over 5000 interoperability solutions for public administrations, included in the collections of more than 40 standardisation bodies, public administrations and open source software repositories. This platform includes the European Federated Interoperability Repository (EFIR).
5. MT@EC	A machine translation service to quickly check the general meaning of incoming information. It also offers a human translation when a high-quality translation is needed.
6. Core vocabularies	Simplified, re-usable and extensible data models that capture the fundamental characteristics of an entity in a context-neutral fashion that public administrations can use to develop new systems, exchange data among existing information systems, integrate data that comes from disparate data sources and open data publishing.
7. The Asset Description Metadata Schema	A simple specification used to describe interoperability solutions, making it possible for interested users to search and discover them.

⁶⁶ European Commission, DG DIGIT, ISA: Our ISA solutions for you.

⁶⁷ IMI incorporates SOLVIT is an online problem solving network in which EU Member States resolve, without recourse to legal proceedings, problems caused by the misapplication of Internal Market laws by public authorities. There is a SOLVIT centre in every European Union Member State (as well as in Norway, Iceland and Liechtenstein) that can help resolve complaints from both citizens and businesses. The service is free of charge and national administrations are committed to providing concrete solutions to problems within 10 weeks.

ISA Solutions ⁶⁶	Description
8. The DCAT Application Profile for data portals in Europe	A common specification for describing public sector datasets in Europe to enable the exchange of descriptions of datasets among data portals.
9. Open e-TrustEx	A cross-sector, open source tool that will help to exchange structured and unstructured documents and to connect to pan-European e-delivery infrastructures with reduced investment.
10. SD-DSS and TLManager	Open Source tools for the creation and validation of e-Signatures in interoperable EU format and for the creation of Trusted Lists.
11. sTESTA	A European backbone network for data exchange between a wide variety of public administrations.
12. CIRCABC	A web-based application that is used to create collaborative workspaces.
13. Online Collection Software (OCS) for European Citizens' Initiatives (ECIs)	A reusable tool that permits the online collection of statements of support in a way that complies with the Regulation on the European Citizens' Initiative (ECI) regarding the format and data collected, as well as with security and technical requirements.
14. European Interoperability Reference Architecture (EIRA)	This architecture classifies and organises building blocks relevant to interoperability, which are used in the delivery of digital public services. The goal is to facilitate interoperability and reuse when developing public services.
15. Interoperability Maturity Model (IMM)	A self-assessment tool that can provide an analysis on the interoperability of a user's service and recommendations on how to improve it. The tool can be used to identify interoperability needs, bottlenecks and best practices.
16. Common assessment method for standards and specifications (CAMSS)	A comprehensive method to help the assessment of ICT standards and specifications aimed at achieving interoperability and avoiding vendor lock-ins.
17. Re3gistry	A tool used to manage and share reference codes supporting the implementation of INSPIRE directive by identifying and developing components that can be reused in multiple sectors.
18. Sharing and reuse strategy	As part of the ongoing development of a holistic approach to sharing and reuse of solutions across border and sectors by public administrations, various quick wins were identified to help both data providers and data users ease the reuse of open data. These include actions which can be implemented with little effort and which can have a significant positive overall impact on sharing and re-use of assets. It includes, for instance, the preparation of common standard clauses for contracts, the exploration and customization of viable business models and incentives for sharing and reuse, etc.
19. ECAS STORK Integration & Federated Managed Authentication Services	This solution will enable access to European Union information systems using the user's national e-ID solution with a minimum impact on the information systems themselves. The integration will reduce the number of credentials a user has to rely on. At the same time, it will enhance security, since national eID solutions are normally based on credentials that are stronger than just a login name and password. The system will also have to cater for users who are not eligible to use STORK. It is intended to also make the integrated system available to other European Union institutions and bodies. ECAS will, for example, be used for the European e-Justice Portal, which operates in 22 languages. A linked solution is the Federated Managed Authentication Services that will allow public officials to log into EC applications and be granted access based on their role or position in a national administration. A number of integration and software packages related to this are available in Joinup.
20. GENIS Interoperable and Generic Notification Services	This solution is a state aid notification information system for the Commission and Member States' administrations. It provides the capabilities necessary to support the shift of responsibility from the Commission to Member States for the control and implementation of state aid.
21. EULF Strategic Vision	The European Union Location Framework (EULF) aims to maximise the benefit from the vast amount of money spent on location-related information and services by governments across Europe by promoting a best practice approach for cross-sector and cross-border sharing and use of this information. The EULF Strategic Vision outlines a vision and framework for 'location-enabled government', based on applying good practice in a number of 'focus areas': policy and strategy alignment, e-government integration, standardisation and interoperability, return on investment and effective governance and partnerships. It identifies the objectives, transition strategy and high-level actions needed in each of these focus areas.

ISA Solutions ⁶⁶	Description
22. Base registries ⁶⁸	ISA's work on base registries provides recommendations to enhance the adoption of best practices related to cross-border interoperability ⁶⁹ . These best practices can enable interfaces between registries to be defined, published and harmonised, at both semantic and technical levels so that they can be used across border.
23. Interoperability agreements on electronic documents and electronic files (E-documents)	ISA's work on e-documents has the objective of developing a common approach to electronic documents and to electronic files, which enable greater efficiency in European public administrations and reduce administrative burdens. Already, European public administrations can avail of guidelines on e-Document engineering methods.

The majority of solutions included in Table 14 have been made available, in 2015, in a dedicated section of the official ISA website called 'Our ISA solutions for you'. In fact, this section aims to provide details on the purpose of each operational ISA solution. In addition to key facts and figures about each of these solutions, it also gives direct access to them (e.g. link to download tools or to access services and documentation for common frameworks) as well as to related promotional material. The creation of this section is in line with one of the recommendation from the interim evaluation of the programme stipulating that 'the ISA programme should reinforce promotion and communication activities regarding the ISA solutions that have produced concrete results'.

Furthermore, respondents from Member States as well as European Commission officials were requested to provide their views on whether all the ISA solutions facilitate interoperability between European public administrations.

In that regard, no clear consensus was reached amongst the respondents. In fact, out of a total of 66 answers, 41% of them considered that all the ISA solutions facilitate interoperability between European public administrations whereas 30% of them did not believe that this is the case for all the ISA solutions. 29% did not express any opinion on this matter, primarily due to a lack of overview of the full range of solutions.

20 respondents who considered that not all the ISA solutions facilitate interoperability between public administrations were asked to justify their answers. In that respect, specific solutions were mentioned and one of them was named more than all the others. In fact, 20% specifically mentioned EUSurvey as an ISA solution that does not facilitate interaction between European public administrations⁷⁰. The evaluation confirms that the available market solutions do not cover all EU official languages, but they are in the process of leveraging more and more existing

⁶⁸ "Base registries" contain basic and reliable information on items such as persons, companies, vehicles, licences, buildings, locations and roads. Such registries are under the legal control of and maintained by individual public administrations.

⁶⁹ D3.1 Final Report on Access to Base Registries, prepared for the ISA Programme by Deloitte CVBA, 2014.

⁷⁰ It is important to note that the 2015 First Semester Monitoring & Evaluation Report, contained in section 3.4, found that 379 users awarded action 2.06 EUSurvey an average Utility score of 4.04/5.

language translation software and services⁷¹. Several respondents also commented that a greater level of adoption of the different solutions will increase the facilitation of interoperability between European public administrations.

Based on the key results delivered by the programme in terms of ISA solutions, the next four subsections will focus on the contribution of the programme to the achievement of each of its specific objectives (cf. subsection 1.2), i.e. to support and promote:

- the establishment and improvement of common frameworks in support of cross-border and cross-sectoral interoperability;
- the operation and improvement of existing common services;
- the establishment, industrialisation, operation and improvement of new common services, including the interoperability of public key infrastructures (PKI);
- the improvement of existing reusable generic tools;
- the establishment, provision and improvement of new reusable generic tools ; and
- the assessment of the ICT implications of proposed or adopted Community (EU) legislation and planning for the introduction of ICT systems to support the implementation of such legislation.

⁷¹ The evaluation team found that sophisticated multilingual online survey tools are readily available on the market. For example, one major online survey company is available in ten EU languages and offers customer support in six. It offers users the function to build surveys in all of the 24 official languages of the European Union except Maltese. Several of these online survey companies use language translation services to pre-translate questions using specific databases. With the apparent move of the online survey market towards multilingualism, users of the EUSurvey tool may increasingly have viable alternatives for their actual surveys although less so for related support services. It is worth noting that EUSurvey was created to satisfy EU Member States' administrations' needs in all EU official languages, thereby ensuring that all citizens can access and participate in surveys equally. It is also in full compliance with EU privacy and administrations' rules and interoperability objectives and is available as a free, open source tool for the creation and management of multilingual surveys and public consultations over the web.

3.3.2 Establishment and improvement of common frameworks

‘Common frameworks’ means strategies, specifications, methodologies, guidelines and similar approaches and documents, which should have been established and improved by the programme by means of studies in accordance with Article 3 of the legal decision.

The ex-ante evaluation set specific expected results for this activity of the programme. First of all, the establishment and improvement of common frameworks should create a common context in which Member States and EU institutions can discuss cross-border and cross-sectoral interoperability. Second, this activity should lead to an refreshed set of concrete frameworks and methodologies, when needed.

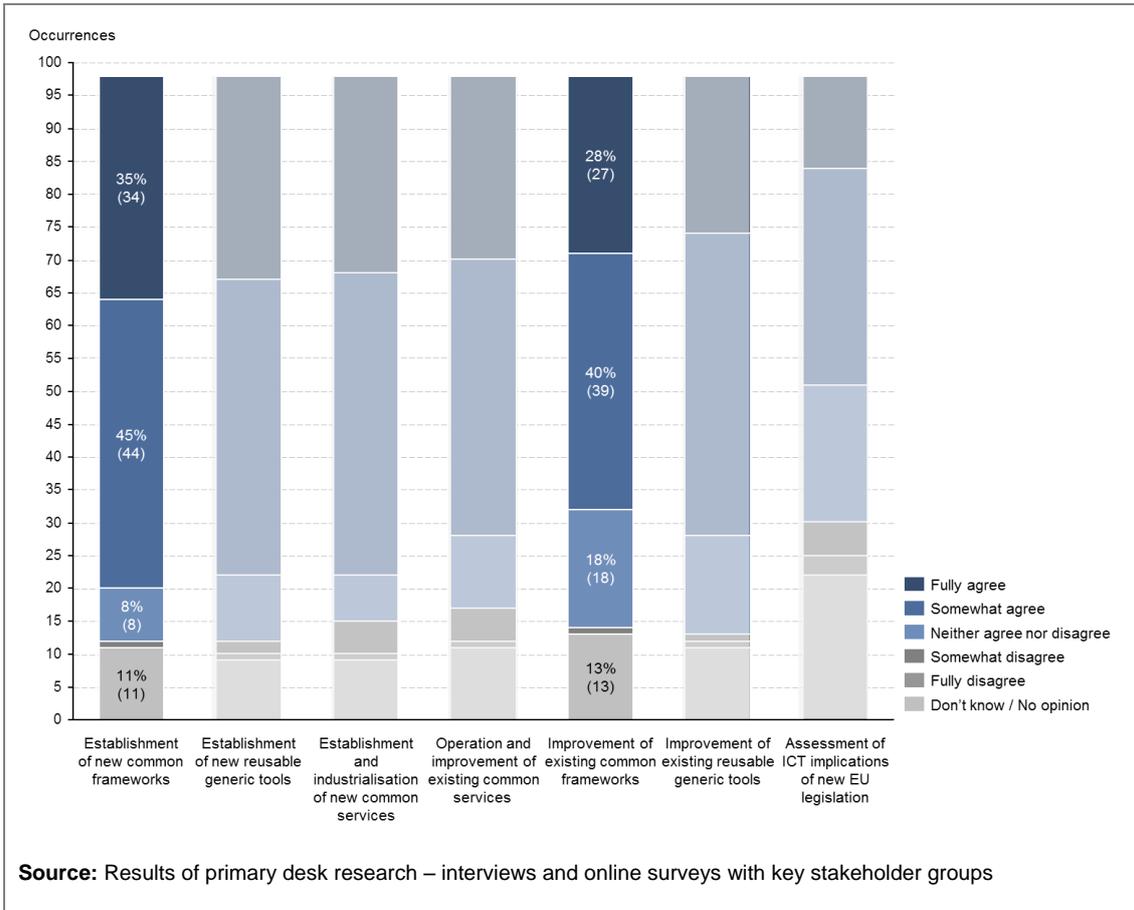
This subsection verifies the extent to which the ISA programme has contributed to the improvement of existing common frameworks as well as to the establishment of new ones keeping, as a reference, the expected aforementioned results. Before looking at the results from surveys and interviews, the evaluation highlights that four common frameworks, carried-forward from the IDABC programme, were improved by ISA, whereas 12 new common frameworks were established as shown in Table 15 below.

Table 15 Common frameworks within the ISA Programme

Carried-forward from IDA, IDABC (4)	New ISA actions (12)
<ul style="list-style-type: none"> • 2.01 EIA • 2.02 CAMSS • 2.07 Your Europe • 4.2.3 NIFO 	<ul style="list-style-type: none"> • 1.02 Access to base registries • 1.03 Catalogue of Services • 1.15 Open Government Data • 1.21 European Legislation Identifier (ELI) • 2.11 Promoting consistent EU e-procurement monitoring and performance • 2.12 eHealth European Interoperability Framework • 2.13 EULF • 2.14 Assessment of TES • 2.15 Interoperability agreements on electronic document and electronic file • 4.1.02 Interoperability Maturity Model • 4.2.05 Sharing and reuse strategy • 4.2.06 Interoperable testbed

In that regard, Figure 19 presents the answers provided by respondents who were requested to provide their level of agreement on the extent to which the ISA programme contributed to the improvement of existing common frameworks as well as to the establishment of new ones.

Figure 19 ISA contribution to common frameworks



As depicted in Figure 19, a large majority of respondents fully and somewhat agreed that the ISA programme has contributed to the improvement of existing common frameworks as well as to the establishment of new common frameworks. The programme is perceived as contributing more to the establishment of new common frameworks than to the improvement of existing ones.

This perception is confirmed by desk research. In fact, based on findings presented in Table 14, the ISA programme has contributed, on the one hand, to the establishment of new common frameworks in support of cross-sector and cross-border interoperability by delivering the following frameworks:

- Interoperability Maturity Model (IMM), published in 2013, aims at providing public administrations insight into two key aspects of their interoperability performance: the current interoperability maturity level of a Public Service (i) and improvement priorities to reach the next level of interoperability maturity (ii). The IMM measures how well a public administration interacts with external entities in order to organise the efficient provisioning of its public services to other public administrations, businesses and or citizens.

- Assessment of Trans-European networks supporting EU policies, ongoing since 2013, is an expanding cartography of the Trans-European Systems (TESs), which currently includes more than 80 solutions to support the European Commission in implementing an overall strategy to rationalise and streamline the IT systems it develops, maintains and operates with the goal of proposing rationalisation recommendations.
- Sharing and Reuse strategy aims to develop a holistic approach to sharing and reuse across border and sectors with a view to helping public administrations all over Europe to share and reuse solutions related to public services delivery in an efficient and effective way. In 2013, the programme identified a number of quick wins to be implemented having significant impact on sharing and reuse of assets. On the other hand, a framework is in the process of being finalised in 2015 together with the governance, the processes and the instruments to optimise the potential of sharing and reuse activities and increase the savings they can bring to public administrations.
- EULF Strategic Vision outlines a vision and framework for 'location-enabled government', based on applying good practice in a number of 'focus areas': policy and strategy alignment, e-government integration, standardisation and interoperability, return on investment and effective governance and partnerships. It identifies the objectives, transition strategy and high-level actions needed in each of these focus areas.

On the other hand, the programme has contributed to the improvement of existing common frameworks: Semantic standards⁷² (action 1.01 Semantic Interoperability) Common Assessment Method for Standards and Specifications (action 2.2 CAMSS), but in particular the European Interoperability Reference Architecture (EIRA) in the framework of action 2.01 EIA.

- Semantic standards: Core vocabularies which are simplified, re-usable and extensible data models that capture the fundamental characteristics of an entity in a context-neutral fashion. The core vocabularies developed under the ISA programme, and endorsed by Member States in May 2012, promote the alignment of concepts relevant for public administrations such as a person (Core Person), a public service (Core Public Service), a location (Core Location), a registered business (Registered Organisation);
- Semantic standards: DCAT Application Profile for data portals in Europe which provides a common specification for describing public sector datasets in Europe to enable the exchange of descriptions of datasets among data portals. It now makes the following possible:

⁷² Even if action 1.01 is categorised as a service, frameworks were also elaborated in the context of this action.

- Data catalogues can describe their dataset collections using a standardised description, while keeping their own system for documenting and storing them.
- Content aggregators, such as the pan-European data portal, can aggregate such descriptions into a single point of access.
- Data consumers can find datasets more easily from a single point of access.
- Semantic standards: Asset Description Metadata Schema (ADMS) which is a simple specification used to describe interoperability solutions, making it possible for everyone to search and discover them. The ADMS was endorsed by Member States in May 2012 and primarily allows:
 - Solution providers to describe their interoperability solutions using the standardised descriptive metadata terms of ADMS, while keeping their own system for documenting and storing them;
 - Content aggregators, such as Joinup, to aggregate such descriptions into a single point of access;
 - ICT developers to more easily explore, find, identify, select and obtain interoperability solutions from a single point of access.

With regard to CAMSS, the Commission has developed a method to assess standards and specifications in the field of ICT based on the best practices of the Member States and aligned with the Regulation on European Standardisation⁷³. A first unofficial version of the method was developed by the Commission and Member States under the IDABC Programme. Through discussions with Member States, standardisation bodies and other stakeholders, the Commission identified a need for revising the first version of CAMSS and developing a widely adoptable official version. In May 2012, a first revised version of CAMSS was finalised and validated by the Commission and Member States. At the time of writing this report, the CAMSS consisted of a documented reference assessment process, a set of quality requirements (criteria), and an assessment library and tools that were updated to v1.0 in March 2015 and made available on Joinup.

In 2013, the action 2.01 EIA released the first version of the European Interoperability Reference Architecture (EIRA) describing a common reference architecture for delivering interoperable digital public services across borders and sectors. The EIRA⁷⁴ is an architecture content metamodel defining the most salient architectural building blocks (ABBs) needed to build interoperable e-Government systems. The EIRA provides a common terminology that can be used by people working for public administrations in various architecture and system

⁷³ Decision of the EEA Joint Committee No 9/2014 of 14 February 2014 amending Annex II (Technical regulations, standards, testing and certification) to the EEA Agreement (Decision located in OJ L 211, 17.7.2014, p. 13–15).

⁷⁴ European Interoperability Reference Architecture (EIRA) on Joinup.

development tasks. The first version of EIRA was delivered along the European Union Cartography (EUCart) which was a result of mapping existing Trans-European Solutions (TES) onto EIRA. This mapping exercise was implemented in a proof-of-concept software application, the Cartography Tool (CarTool). In June 2014, the ISA Coordination Group endorsed the current versions of EIRA and CarTool stating that they are mature enough to go to public consultation and to be used in pilot projects. In the period September 2014 – May 2015, a number of pilots were conducted using the EIRA with public administrations in Denmark, Estonia, and the Netherlands, and with European Commission DGs DIGIT, CNECT (e-SENS project), and MARE. At the time of writing this report, the latest version of EIRA is under public consultation. Overall, it is worth highlighting that even if action 2.01 EIA was slow to start and get off the ground, significant progress has been made since 2014.

However, the evaluation noticed that the common frameworks delivered by the programme did not focus much on legal and organisational interoperability, even if some progress has been made through action 4.2.05 - Sharing & reuse strategy, as well as in action 2.14 - Assessment of TES. action 4.2.05 - Sharing & reuse strategy produced several deliverables on legal and organisational interoperability including sharing and re-use guidelines and templates for implementing agreements (including service conditions) and governance models for common IT solutions. In addition, common "standard" clauses for contracts, which public administrations could use when procuring services, were made available on Joinup in February 2013.

As part of action 2.14, the current state of play on organisational interoperability is in the process of being completed. The outcome of this activity could also be a valid input to the extension and update of the EIF in the context of the NIFO Action.

3.3.3 *Establishment, industrialisation, operation and improvement of existing and new common services*

‘Common services’ means operational applications and infrastructures of a generic nature which meet common user requirements across policy areas, which should have been established, operated and improved by the programme by means of projects in accordance to Article 3 of the legal decision.

As with the frameworks, the ex-ante evaluation set specific expected results for this activity of the programme as well. First of all, the programme should improve services and infrastructures and ensure continuity and professionalism in the delivery of the common services portfolio. Second, the programme should ensure an increased availability of services that meet the needs of sectors and Member States.

This subsection verifies the extent to which the ISA programme has contributed to the establishment, industrialisation, operation and improvement of existing and new common services, keeping as a reference the expected results mentioned above.

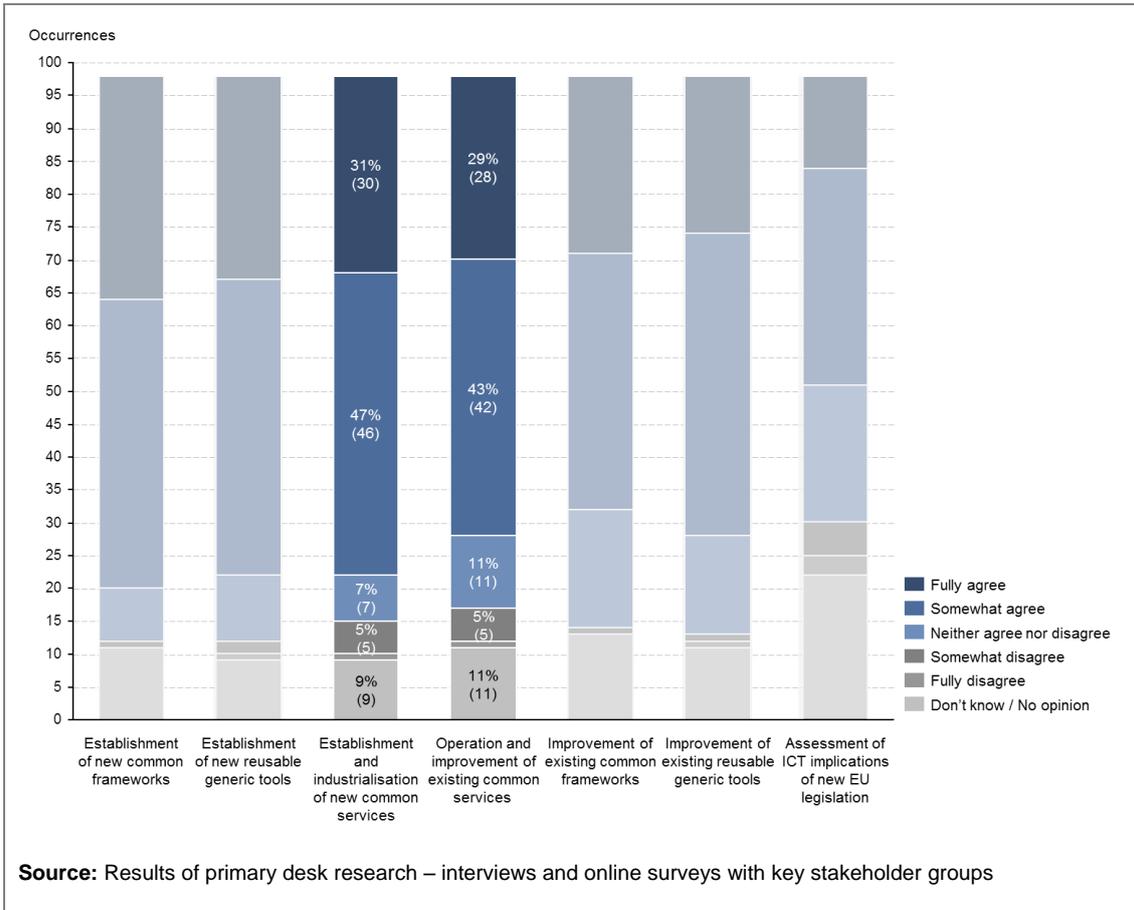
Before looking at the results from the interview and online surveys, the evaluation highlights that four common services, carried-forward from the IDABC programme, were improved by ISA, whereas six new common services were established as shown in the Table 16.

Table 16 Common Services within the ISA Programme

Carried-forward from IDA, IDABC (5)	New ISA actions (6)
<ul style="list-style-type: none"> • 1.01 Promoting semantic interoperability [...] • 2.03 PKI Services • 2.04 sTESTA • 2.05 CIRCABC • 2.06 EUSurvey 	<ul style="list-style-type: none"> • 1.18 Federate Managed Authentication Services for ECAS • 1.19 PEPPOL sustainability • 1.20 Application of EU law [...] • 2.08 Machine Translation Service by the European Commission • 2.16 European Single Procurement Document Service • 4.2.01 ISA Integrated Collaboration Platform

In that regard, Figure 20 presents the answers provided by respondents who were requested to provide their level of agreement on the extent to which the ISA programme contributed to the operation and improvement of existing common services as well as to the establishment and industrialisation of new ones.

Figure 20 ISA contribution to common services



As depicted in Figure 20, a large majority of respondents fully and somewhat agrees that the ISA programme has contributed to the establishment and industrialisation of new common services as well as to the operation and improvement of existing ones. The programme is perceived as contributing slightly more to the establishment and industrialisation of new common services than to the operation and improvement of existing ones.

Based on desk research as well as on the findings presented in Table 14, the ISA programme has contributed, on one hand, to the establishment and industrialisation of new common services in support of cross-sector and cross-border interoperability by delivering the following three ISA solutions:

- Joinup⁷⁵ which is a collaborative platform, launched on 9 December 2011, offering several services that aim to help e-Government professionals share their experience

⁷⁵ Even though Joinup is highly reused by Member States, the evaluation highlights that a severe (technical) issue led to the unavailability, under-performance and abnormal behaviour of the Portal for almost a month⁷⁵, in June 2014. Since this event, the

with each other. It aims to support them to find, choose, re-use, develop and implement interoperability solutions. It was established as a merger of the Open Source Observatory and Repository (OSOR.eu) and the Semantic Interoperability Centre Europe (SEMIC.eu) platforms. In December 2014, the ePractice platform was also integrated into Joinup which is now a single-access point to more than 5000 interoperability solutions for public administrations, included in the collections of more than 40 standardisation bodies, public administrations and open source software repositories.

- MT@EC which aims to provide a new service relying on a system based on SMT (Statistical Machine Translation). SMT provides an improved machine translation service both in terms of quality of output and number of supported languages. A total of 552 language pairs covering all of the EU official languages are currently provided. This service generated 7195735 of machine translated pages in 2014.
- Federated Managed Authentication Services for ECAS which aims to allow public officials to log into EC applications and to be granted access based on their role or position in a national administration.

Commission has taken the necessary measures to ensure that similar issues will not reappear in the future. At the following ISA Coordination Group meeting⁷⁵, the ISA Coordination Group members confirmed that Joinup was functioning smoothly without any issues.

On the other hand, it has contributed to the operation and improvement of existing common services by delivering the following three ISA solutions:

- sTESTA which is a network allowing exchange of data between European and national administrations by guaranteeing security and availability of these data. sTESTA replaced the first TESTA (Trans European Services for Telematics between Administrations) network that was established under the IDA programme. A migration from sTESTA to TESTA NG (New Generation) is currently on-going under the ISA programme.
- CIRCABC which is an evolution of the previous CIRCA tool that was firstly established under the IDA programme. CIRCABC (Communication and Information Resource Centre for Administrations, Businesses and Citizens) provides a web-based application that is used to create collaborative workspaces. It is divided into categories and interest groups, allowing people to manage content, users and communication features. In addition to further development and maintenance of CIRCABC, the migration from CIRCA to CIRCABC has been conducted within the ISA programme. In fact, a migration tool has been developed allowing for the smooth migration of the complete information including users, rights, content and metadata as well as full history from CIRCA to CIRCABC. In 2014, more than 4.5 million documents were uploaded and downloaded.
- EUSurvey which is a web-based application available in 24 languages that aims to allow the creation and conduct of online surveys. EUSurvey is a new version of the IPM (Interactive Policy Making) tool that was established under the previous IDABC programme. IPM was replaced by EUSurvey in October 2013. This first release included a newly designed user interface, offering additional features and different enhancements improving the usability and stability of the software compared to IPM. In 2014, more than 2800 surveys were created with EUSurvey.

3.3.4 Establishment, provision and improvement of existing and new reusable generic tools

'Reusable generic tools' means reference platforms, shared and collaborative platforms, common components and similar building blocks that meet common user requirements across policy areas, which should have been established, provided and improved by the programme by means of projects in accordance with Article 3 of the legal decision.

The expected results set by the ex-ante evaluation of the ISA programme are also taken into account for this activity. As for the common services, an increased availability of tools that meet the needs of sectors and Member States is expected by the programme, as well as availability of new tools in time.

This subsection verifies the extent to which the ISA programme has contributed to the establishment, provision and improvement of existing and new reusable generic tools keeping as a reference the expected results mentioned above. Before looking at the results from the interview and online surveys, the evaluation highlights that six reusable generic tools, carried-forward from the IDABC programme, were improved by ISA, whereas 13 new reusable generic tools were established as shown in Table 17.

Table 17 Reusable generic tools within the ISA Programme

Carried-forward from IDA, IDABC (6)	New ISA actions (13)
<ul style="list-style-type: none"> • 1.04 ECAS-STORK Integration • 1.07 e-PRIOR • 1.09 Supporting tools for TSL and e-signature creation/verification • 1.10 IMI system⁷⁶ • 1.11 Interoperable and Generic Notification Services • 1.14 Cross-Sector SOLVIT 	<ul style="list-style-type: none"> • 1.05 STORK Sustainability • 1.06 CIPA Sustainability • 1.08 Trusted Exchange Platform (E-TrustEx)⁷⁷ • 1.12 OSS platform for online collection of statements of support for European citizens' initiatives⁷⁸ • 1.13 LEOS • 1.16 CISE • 1.17 Reusable INSPIRE reference platform⁷⁹ • 1.22 Big data and open knowledge [...] • 2.09 Document repository services for EU policy support • 2.10 Promoting consistent EU e-procurement monitoring and performance • 2.17 eCertis action • 2.18 Participatory knowledge for supporting decision making • 4.2.4 EFIR

In that regard, Figure 21 presents the answers provided by respondents who were requested to provide their level of agreement on the extent to which the ISA programme contributed to the improvement of existing reusable generic tools as well as to the establishment and provision of new ones.

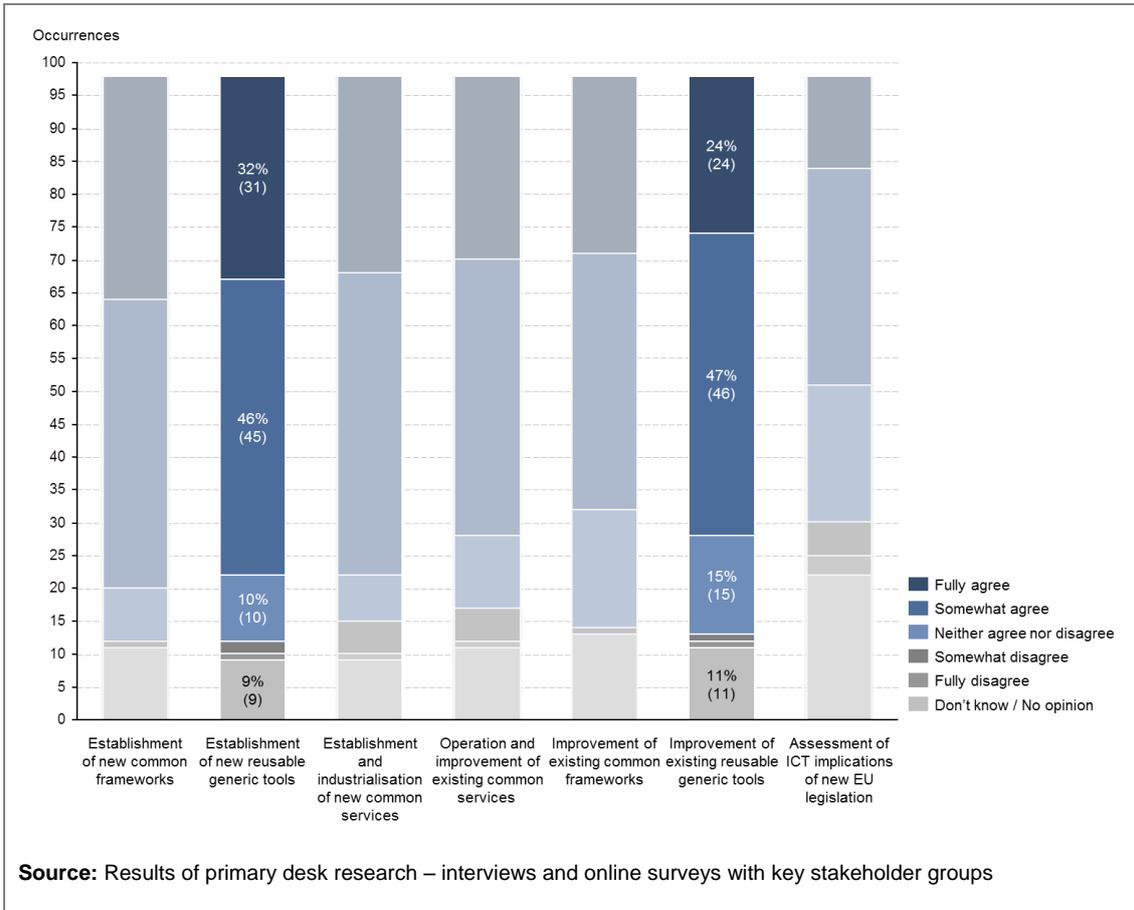
⁷⁶ Although funded as a tool under the ISA programme, the IMI system now operates as an EC service to Member States' administrations.

⁷⁷ Action 1.08 Trusted Exchange Platform (e-TrustEx) can be considered a tool as well as a service.

⁷⁸ Action 1.12 OSS platform for online collection of statements of support for European citizens' initiatives can be considered a tool as well as a service.

⁷⁹ Action 1.17 Reusable INSPIRE reference platform can be considered a tool as well as a service.

Figure 21 ISA contribution to reusable generic tools



As depicted in Figure 21, a large majority of respondents fully and somewhat agrees that the ISA programme has contributed to the establishment and provision of new reusable generic tools as well as to the improvement of existing ones. The programme is perceived as contributing even more to the establishment and provision of reusable generic tools rather than to the improvement of existing ones.

Based on desk research as well as on the findings presented in Table 14, the ISA programme has contributed, on one hand, to the establishment and provision of new reusable generic tools in support of cross-sector and cross-border interoperability by delivering the following three ISA solutions:

- Open e-TrustEx which is an open-source tool that facilitates the secure exchange of structured and unstructured documents between Public Authorities at European, national and local level via standardised interfaces. In 2014, e-TrustEx transmitted more than 510000 electronic messages (around 45000 messages per month on average);
- Online Collection Software (OCS) for European Citizens' Initiatives (ECIs) which is an open-source software providing all the basic functionalities to collect statements of support online through forms compliant with the ECI Regulation, securely store

signatories' data and export the data to the competent national authorities (in accordance with Article 6(2) of the ECI Regulation). As an evidence of its success, even though ECI organisers have the choice to use the software developed by the European Commission or any other software available on the market (as long as it complies with the ECI Regulation and related Commission Implementing Regulation N°1179/2011), it should be noted that, at the time of writing this report, the ECI Online Collection Software developed by the European Commission has been used or was planned to be used by all ECI organisers so far;

- Re3gistry which is a tool to manage and share 'reference codes' that provides a central access point allowing labels and descriptions for reference codes to be easily looked up by people or retrieved by machines.

On the other hand, it has contributed to the operation and improvement of reusable generic tools by delivering the following five ISA solutions:

- ECAS STORK Integration aims to enable access to European Union information systems using user's national eID solution with minimal impact on the information systems themselves. In the framework of the ISA programme a pilot interconnection between ECAS and STORK was undertaken to demonstrate that ECAS was able to consume identities provided by STORK. This proof-of-concept was then transformed into an official STORK pilot (i.e. CIRCABC was used for demonstration purposes). Following this pilot, the next ISA activities were focused on the generalisation of the service to all information systems relying on ECAS for authenticating users.
- Open e-PRIOR is an open-source e-Procurement solution. The 'e-PRIOR' project was initially funded by the IDABC to show that emerging standards to enable interoperability in a cross-border environment could be used in a real-life pilot of Business to Government eInvoicing. This first pilot paved the way for further development of e-Prior under the umbrella of the ISA programme. Open e-Prior now covers not only e-Invoicing but the whole post-awarding cycle of e-procurement: e-Catalogue, e-Ordering, e-Fulfilment and e-Invoicing. In addition, since March 2014, e-PRIOR has also provided an e-Submission module as part of the pre-award cycle, with tools allowing economic operators to prepare and submit tenders for a published call for tender, and contracting authorities to receive and handle such electronic tenders.
- SD-DSS and TLManager are tools for e-Signature creation and validation that Member States could use at national level. The SD-DSS tool aims to facilitate Member States to render their public e-services more efficient and to ensure interoperability for one of the key-enablers for secure electronic services, i.e. e-signatures. DSS (Digital Signature Services) provides all the functionalities for the automated creation and validation of e-Signatures, checking them against the European Member States' so-called 'Trusted Lists' (each Member State keeps a public list of supervised/accredited service providers

issuing qualified certificates to the public). In addition, SD-DSS can enable the electronic signing of documents in different portals and relies on Trusted Lists. 'TLManager', a complementary piece of software was developed to enable the creation, editing and maintenance of these Trusted Lists.

- The Internal Market Information (IMI) System aims to provide a flexible administrative cooperation platform amongst different policy areas. It facilitates the exchange of information between public administrations across Europe involved in the practical implementation of EU law. The first premises of the development of the platform happened under the umbrella of the IDA programme in 2005. Over the last six years, the number of policy areas covered has been constantly extended so that IMI now supports 15 administrative procedures relating to nine different policy areas under the Internal Market. IMI connects around 13,000 users in more than 7,000 public authorities in all 31 EEA Member States.
- Generic and Interoperable Notification Services (GENIS) which provides IT solutions to support the State Aid Notification Process in a more complete and better way than before, while keeping a significant level of data security, confidentiality and System reliability. In fact, GENIS allows development and management of large web forms with complex validation requirements. GENIS also saves times in creating new forms, updating existing forms and in deployment of such web form services.

Overall, the evaluation confirms that the programme made available tools meeting the needs of specific sectors such as administrative cooperation among several internal market policies, state aid, eProcurement and European Citizens Initiative. The programme contributed significantly in making available tools needed across multiple sectors, such as SD-DSS and TLManager for e-Signature and validation, ECAS-STORK integration and Open e-TrustEx. Most of the new reusable generic tools were also delivered in due time by the programme, with the exception of STORK sustainability which suffers from a significant delay (cf. details included in subsection 3.2.3).

3.3.5 *Assessment of ICT implications of proposed or adopted EU legislation*

In order to assess the effectiveness of the assessment of ICT implications, the evaluation looked at the following expected results documented by the ex-ante evaluation of the ISA programme:

- Smooth implementation of EC legislation;
- Identification of the needs for services and tools in time so that requirements are fulfilled when the legislation comes into force;
- Understanding of ICT aspects of EU policies.

As we can deduce from the expected results set by the ex-ante evaluation and as stipulated in both the ISA legal decision and EIS, carried forward from the IDABC programme, the assessment of ICT Implications of new EU legislation is an important activity of the programme. The scope of this activity goes even beyond the scope of the ISA programme, by covering any legislation having ICT implications (Article 3(b) of the ISA legal decision). The importance of assessing ICT impacts of EU legislation is now reflected in the Better Regulation guidelines⁸⁰ and the process to assess the ICT impacts of EU legislation referenced in the Better Regulation Toolbox⁸¹. From now on, new EU initiatives should all be 'digital and internet-ready' and operate both in the digital and physical world.

This political achievement was made possible thanks to the change in the scope of the action and intensive communication efforts from the ISA unit to the different Commission DGs and services.

As mentioned in the ISA Work Programme 2nd revision 2012, before 2013, the action initially aimed at (i) testing the existing method on real-life cases with Commission services being in the process of drafting legislation (2010 – 2012); and (ii) offering it to all Commission services from 2012. Although this method was indeed offered to numerous DGs in the period of 2010-2012, none of them came forward to test this method on their legislative draft.

In 2012, the ISA unit realised the need to (i) drastically review the existing method, perceived as too complex; (ii) support the Commission services performing this assessment by making a pool of resources (ICT experts) available to them; and (iii) promote the method and the service within the European Commission. For this purpose, the ISA unit adopted a collaborative approach and consulted 38 Commission officials from 11 different Commission DGs to gather their needs on the subject and collect their views and opinions on the existing method and on the proposed

⁸⁰ SWD(2015) 111 final, Commission Staff Working document, Better Regulation guidelines, Chapter III Guidelines on Impact Assessment (COM(2015) 215 final; SWD(2015) 110 final), European Commission, Strasbourg, 19.5.2015.

⁸¹ Better Regulation 'Toolbox', complementing the Better Regulation Guidelines presented in in SWD(2015) 111; Tool #23: ICT assessment, the digital economy and society, European Commission, Strasbourg, 19.5.2015.

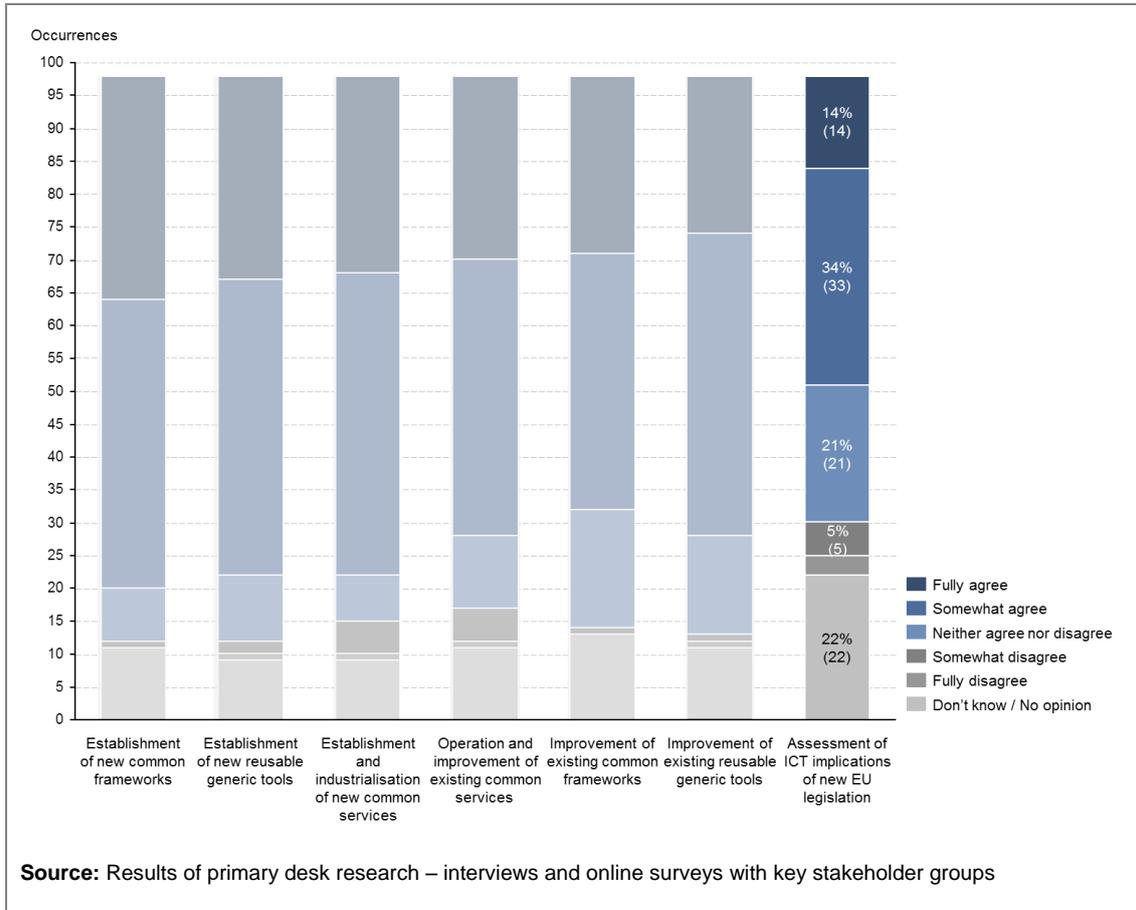
changes to make. In parallel, the first ICT Assessments were conducted for several DGs including DG HOME, DG JUST, SECGEN and DIGIT to test this new method and continuously improve it, based on the lessons learned from each assessment. These assessments came from a direct request from the DGs to which the initiative was presented during the consultation or from the regular screening of new Commission initiatives (roadmaps), as performed by the programme to anticipate the needs for new ICT Assessments.

Commission DGs can now use the method to perform their assessments, either on their own or with the help of DIGIT; a specific service is indeed provided for free by the programme to Commission DGs willing to assess the ICT impacts of EU legislation. Taking into account that the ICT Assessment method is now included in the Better Regulation toolbox as a tool for policy-makers aiming at designing and assessing new initiatives⁸², the contribution of the programme to the Better Regulation can be considered as significant from a strategic point of view, and to a lesser extent in terms of operational results since not many ICT Assessments were conducted compared to what was foreseen.

Besides the practical results achieved by the programme on the assessment of ICT implications, especially in the period 2013-2015, the evaluation assessed the views from ISA stakeholders on the key results achieved by the programme on such an important programme activity. In that regard, the figure below presents the answers provided by respondents who were requested to provide their level of agreement on the extent to which the ISA programme contributed to the assessment of ICT implications of new EU legislation.

⁸² A specific toolbox complements the Better Regulation Guideline presented in in SWD (2015: 211).

Figure 22 ISA contribution to the assessment of ICT implications



As depicted in Figure 22, 14% of respondents fully and 34% somewhat agreed that the ISA programme has contributed to the assessment of ICT implications of EU legislation. However, this does not represent a majority of respondents. Indeed, 21% neither agreed nor disagreed and 5% and 3% respectively somewhat and fully disagreed whereas 23% did not know or did not express any opinion on this matter.

In order to improve the effectiveness of this action, comments were made on the fact that the method, currently under revision, should on one hand be more used by the European Commission but remain applicable at Member States' level. At the moment, the evaluation notes a lack of awareness of the results of this action, especially at Member States' level. The need for more awareness on the results delivered by this activity was indeed raised by seven interviewees, six of whom were Member States' representatives.

Overall, the evaluation confirms that the programme achieved the expected results set for this activity from a strategic point of view, but to a lesser extent from an operational standpoint:

- The real-life ICT assessment cases performed in 2014 and 2015 contributed to the smooth implementation of EC legislation;

- Having a tool dedicated to ICT assessments as part of the Better Regulation toolbox facilitates the identification of the needs for services and tools in time so that requirements are fulfilled when the legislation comes into force;
- The reviewed ICT assessment method ensures a better understanding of ICT aspects of EU policies, as it target policy-makers before going into technical considerations.

The ISA programme should continue to support Commission DGs and services in their ICT assessment so as to multiply their experience on this subject and promote the need for assessing ICT implications of new or revised legislation. Once the method is tested and a proven tool to successfully perform ICT assessment, efforts should be dedicated to developing a method targeting national public administrations.

3.3.6 Conclusions

The following box summarises the main conclusions related to EQ4: 'To what extent did the ISA programme's results and impacts achieve its objectives?' and EQ5: 'Are there aspects that were more or less effective than others, and, if so, what lessons can be drawn from this?'

Conclusion N°6

The ISA programme has delivered operational solutions facilitating effective collaboration between European public administrations. Overall, more interviewees and online survey respondents believed that all the ISA solutions facilitate interoperability between European public administrations (41%) than did not (30%). The remaining respondents said that they did not have sufficient overview of the programme to comment on all solutions.

These solutions, i.e. common frameworks, reusable generic tools and common services, contributing to the achievement of the programme's objectives (available in Table 15), are either IDABC solutions that have been further improved in the course of the ISA programme or new solutions that have been developed in the framework of the programme. Based on the evidence presented in the respective Annex, the evaluation notes that 19 actions within the current ISA Work Programme were established under IDABC. This is comprised of six generic tools, six common services, four common frameworks, one action related to the assessment of ICT implications and two accompanying measures. It was the widespread perception of interviewees and survey respondents that the main results of the programme are related to the following actions: the promotion of semantic interoperability (action 1.01), Joinup (action 4.2.01), Internal Market Information system (action 1.10), STORK sustainability (action 1.05), sTESTA (action 2.04) and the European Interoperability Architecture (action 2.01) even if it was slow to start and get off the ground. Although adoption of E-PRIOR (action 1.07) by Member States' administrations has been underwhelming, it is also considered as an achievement of the programme and has delivered savings at EC level.

Although developed under the IDABC programme, the European Interoperability Framework (EIF) can be considered as part of the key results of the programme since ISA action 4.2.3 National Interoperability Framework Observatory (NIFO) actively supports the implementation of the EIF at Member State level, through the transposition of the EIF into national interoperability frameworks. However, as section 3.4 will show, the impact of the EIF has not been fully achieved. While there is a reasonably successful overall rate of alignment with the EIF at national level (72%), the implementation rate by Member States of 28% is disappointing.

The ISA solution most commonly cited by interviewees and online survey respondents as not facilitating interaction between European public administrations was EUSurvey, a free-of-charge online survey tool used by Commission DGs, Member States and others. Although the evaluation notes that EUSurvey contributes as an accompanying measure to the programme's objectives, in terms of sharing and re-use of an eParticipation tool rather than a common service, the need for its further development in the ISA² programme has to be appraised.

Conclusion N°7

Member States' representatives and EC officials affirmed their view that the ISA programme contributes more to establishing new common frameworks, common services and reusable generic tools rather than in improving existing ones. In addition, the evidence from the evaluation confirms that the programme contributed to sharing and re-use, through the establishment of common frameworks. The programme also contributed to organisational and legal interoperability, although the results from the ISA actions are scattered in this regard, which clearly indicate space for improvement.

The number of respondents agreeing that the programme has contributed to the assessment of ICT implications of new EU legislation is, however, lower than for the contribution of the programme to the achievement of all its other specific objectives. As previously mentioned, this can be explained by the fact that ISA action 3.01 Assessment of ICT implications of new EU legislation is carried forward from the IDABC programme but that neither the European Commission nor Member States widely used the method developed under this predecessor programme (e.g. the budget allocated to this action for 2011 and 2012 was even not executed). This existing method has, thus, been tested and applied to deliver concrete results (i.e. assessment of the ICT impacts of five main initiatives) only as of 2014.

Nevertheless, the ISA programme had the opportunity to revise the 'Better Regulation' guidelines⁴⁵ to provide input to ensure that Assessment of ICT implications is clearly part of this new flagship EC policy, which should strengthen the action in future. This has resulted in the ISA programme having a defined role to promote this exercise and support the DGs and services undertaking these assessments with guidance as part of this internal EC process.

To conclude, the evaluation confirms that the ISA programme has contributed to the achievement of all its specific objectives including supporting and promoting the assessment of ICT implications of new EU legislation although more can be done in the ISA² programme. The evaluation also identifies a need to raise awareness of the results delivered by this action in the last two years, and for reviewing its scope. Indeed, it noted that the current scope of ICT Assessments goes beyond the main objective of the programme as stipulated in Article 1 of the ISA legal decision.

3.4 Utility

The evaluation of the utility of the ISA programme is driven by the following evaluation questions:

EQ6: 'How did the ISA programme's achieved and anticipated results and impacts compare with the business needs they intended to address?'

EQ7: 'Which measures could be taken to improve the utility of the next programme's actions?'

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ6 and EQ7.

To answer these evaluation questions, the evaluation refers to 'impacts' achieved as the benefits generated by the programme for its targeted stakeholders, i.e. European public administrations. Since one of the main impacts expected by the programme is to provide interoperable solutions available for use, the evaluation looks at the use of ISA solutions by the targeted stakeholders. Since the evaluation question EQ7 aims to gather potential measures to be taken to improve the utility of the next programme's actions, the evaluation verified this aspect with the programme's stakeholders who provided valuable insights on this based on their experience within ISA, previous programmes, and other EU initiatives.

3.4.1 *Benefits generated by the ISA programme*

In accordance with the ISA legal decision, and in particular Article 1 and Article 13, the programme should have supported the delivery of electronic public services, and generated benefits for the implementation of EU policies. This subsection appraises the extent of these achievements as well as analyses the general perception of the Member States (targeted stakeholders) on the benefits delivered by the programme.

3.4.1.1 *General perceptions on the benefits delivered by the programme*

The evaluation verified with the Member States' representatives what they considered as benefits delivered by the ISA programme to their countries. Based on 97% (40) of respondents who agreed that the programme delivered benefits, the most commonly cited examples, by 51% (21) of surveyed respondents, were the reuse of ISA solutions. Interaction, networking and sharing was cited by 29% (12) of respondents. A further 29% (12) identified the existence of the programme itself as a means to raise awareness about the importance of interoperability and to keep it on the political agenda. 22% (9) of respondents said that the ISA programme provided their countries with good reference points, networks and solutions (e.g. EIF/NIFO, sTESTA and CIRCABC) from which it could develop interoperability nationally.

Respondents provided specific areas or ISA actions as evidence in addition to the general comments above. ISA's work related to INSPIRE/geo-spatial data (linked to action 1.17) and action 2.05 CIRACBC were mentioned by 7% (3) of respondents. e-Signatures (linked to actions 1.04 & 1.09), action 2.02 CAMSS, action 2.04 sTESTA and action 4.2.01 Joinup were each mentioned by 5% (2) of respondents.

The EIF (linked to action 4.02.03 NIFO) was cited by 10% (4) of respondents as an inspiration for national initiatives. However, the evaluation notes that the expected benefits of the EIF have not been fully achieved. The State of Play of Interoperability in Europe – Report 2014⁸³ found that while national interoperability frameworks (NIFs) are aligned with the EIF at a rate of 72%, the average implementation rate of the EIF at national level is 28%. A large part of this low rate of implementation is the fact that the EIF, an EU Communication, is not binding for European public administrations. Furthermore, the choice of verb in Article 1 of the legal decision captures the relatively limited extent of the programme's capacity to ensure adoption of its solutions, including the EIF through action 4.02.03, by stating that '*The objective of the ISA programme is to support cooperation between European public administrations by facilitating the efficient and effective electronic cross-border and cross sectoral interaction between such administrations.*'

The evaluation confirms that the reuse of ISA solutions is an important aspect as acknowledged by the interim evaluation of the programme, which recommended the establishment of a control mechanism to ensure the reuse of operational ISA solutions. However, as specified in the ISA legal decision, the use of ISA solutions should be financed by the end users, and therefore it is not under the direct responsibility of the programme itself.

3.4.1.2 Contribution to the delivery of electronic public services

Establishing the perceived contribution of the programme to the delivery of electronic public services was an essential part of the evaluation. Member States' representatives, EC officials and other ISA stakeholders agreed at a rate of 84% (92) that the programme enables 'the delivery of electronic public services supporting the implementation of EU policies and activities'. 5% (5) did not believe this to be the case whereas those who did not know or did not express an opinion amounted to 11% (13).

Further analysis of the findings of the interviews and online surveys shows it was the perception of respondents that action 1.07 e-Prior/e-Procurement was the main electronic public service supported by the ISA programme. It occurred in 28 responses followed closely by e-Identification (or e-ID; 24 occurrences) and e-Signature (20). Less common, but nevertheless

⁸³ The State of Play of Interoperability in Europe – Report 2014

frequently mentioned, were the electronic public services delivered by action 2.04 sTESTA (7), input for e-Invoicing (7) and action 1.04 ECAS-STORK (5).

The perceptions of the two different surveyed stakeholder groups, EC officials and the Member States' representatives, did not vary substantially. Action 1.07 e-Prior/e-Procurement was listed most frequently by both groups as the main electronic public service supported by the ISA programme. It is important to note that e-ID and e-Signature (linked to action 1.09) occurred in the responses of the Member States' representatives exactly as often as the most commonly mentioned option, action 1.07 e-Prior/e-Procurement. However, EC officials clearly consider action 1.07 e-Prior/e-Procurement as the main electronic service, which was mentioned in one in every four responses. Furthermore, a similar response pattern was observed between the two groups of respondents in terms of the remaining most frequently mentioned main electronic public services; these were e-ID, e-Signature, e-Invoicing and action 2.04 sTESTA.

Given that it is not sufficient to rely solely on the varying levels of knowledge of interviewees and online survey respondents when discussing a topic as objective and as important as utility, the evaluation team complemented the aforementioned findings with further desk research. The 2015 First Semester Monitoring & Evaluation Report, compiled by CGI-Accenture, provides valuable desk research in this regard. This biannual report measures the progress made and results obtained on the availability, effectiveness, efficiency, perceived quality and utility evaluation criteria at action level through a survey of users and beneficiaries of each action. It measures the utility of 13 ISA actions, the average score for which is 4.07/5. ISA actions' Project Officers nominate users and beneficiaries of each action to participate in each biannual survey. It can be inferred that this survey group is more knowledgeable about, and familiar with, these actions and, therefore, is better placed to provide feedback on their utility.

Utility is measured using an adaptation of the VAST (Value Assessment Tool) methodology⁸⁴, considering an additional dimension related to the Global and Intermediate objectives of the ISA programme. The assessment is based on several dimensions: value for the European Union⁸⁵; value for the European Commission⁸⁶ and value for cross-border and cross-sector interoperability⁸⁷,

The findings demonstrate that six actions, shaded below in grey, have an above average utility score of the 13 assessed. It is worth mentioning that actions with a low sample size, namely

⁸⁴ More information can be found on: <http://ec.europa.eu/dgs/informatics/vast/>

⁸⁵ Looks at the assessment of the external value of an information system or an IT project. The 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).

⁸⁶ 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.

⁸⁷ Covers all aspects of how an Information System or an IT Project can support the efficient and effective cross-border and cross-sector interactions between European Public Administrations.

action 1.8 E-TrustEx (3 respondents), action 1.12 OSS-ECI (5 respondents) and action 2.1 ((6 respondents) represent the highest utility scores. Due to the small sample size for these actions, the analysis presented for them is not valid to calculate statistically meaningful results and has an informative purpose only. However, there is no common trend or impact detected on the metrics average scores (i.e., common trend for perceived quality and utility) when reducing these values from the average calculations.

It is also worth noting that all of these actions have a utility score of over 3.5/5, which is 70% and reiterating that these are the scores provided by users and beneficiaries of these actions rather than a wider audience, many of which are unaware of their work.

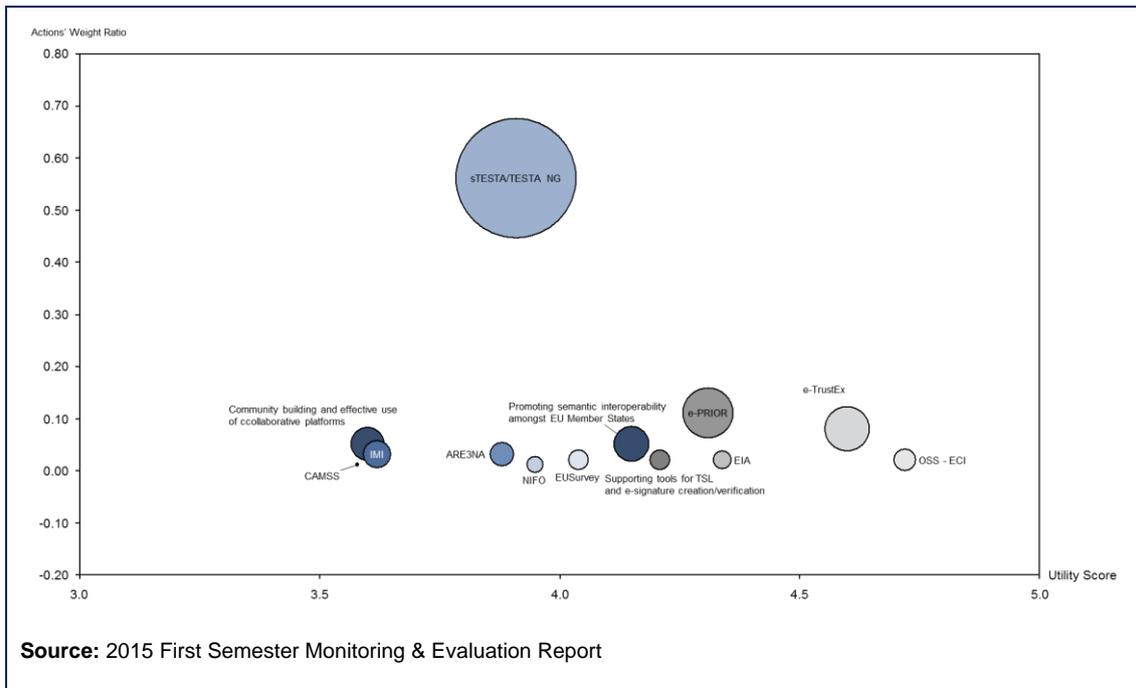
Table 18 Utility scores at action level

Action N°	Action Name	Allocated Budget	Actions' Weight Ratio ⁸⁸	Number of respondents	Utility Score
1.12*	Open Source Software for online collection of statements of support for European Citizens' Initiatives	EUR 2,110,000	0.02	5	4.72
1.08*	Trusted Exchange Platform (E-TrustEx)	EUR 7,910,000	0.08	3	4.60
2.01*	European Interoperability Architecture (EIA)	EUR 1,635,000	0.02	6	4.34
1.07	e-PRIOR	EUR 10,450,000	0.11	42	4.31
1.09	Supporting tools for TSL and e-signature creation/verification	EUR 1,760,000	0.02	33	4.21
1.01	Promoting semantic interoperability amongst the European Union Member States	EUR 5,350,000	0.05	81	4.15
2.06	EUSurvey	EUR 1,883,000	0.02	379	4.04
4.2.03	National Interoperability Framework Observatory (NIFO)	EUR 1,245,000	0.01	19	3.95
2.04	Data communication network service (sTESTA/TESTA NG)	EUR 55,760,000	0.56	42	3.91
1.17	Re-usable Inspire reference platform (ARE3NA)	EUR 2,600,000	0.03	25	3.88
1.10	Internal Market Information (IMI) system	EUR 3,360,000	0.03	2332	3.62
4.2.02	Community building and effective use of collaborative platforms	EUR 4,550,000	0.05	97	3.60
2.02	Common Assessment Method Standards and Specifications (CAMSS)	EUR 580,000	0.01	20	3.58

⁸⁸ The action weight ratio is calculated by dividing action budget at completion over the sum of the budget at completion of all the actions which utility is assessed.

The figure below displays these 13 ISA actions on the basis of the relation between each action's weight ratio and the utility score that the action has attained. Furthermore, the size of each bubble within the figure illustrates the size of the allocated budget of the action.

Figure 23 ISA actions measured for Utility



Returning to final evaluation of the ISA programme's online survey, respondents provided insights into what they considered the most and least valuable actions for 'the delivery of electronic public services supporting the implementation of EU policies and activities'.

As regards the most valuable actions, 50% (16) of respondents named action 1.01 Semantic interoperability. Action 2.01 Elaboration of a common vision for a European Interoperability Architecture (EIA) was mentioned by 41% (13) of respondents and action 1.02 Access to base registers was mentioned by 34% (11) of respondents. These were followed by action 1.03 Catalogue of services and action 1.17 Reusable Inspire Reference Platform (ARE3NA), which were each cited by 31% (10) of respondents.

On the other hand, action 2.06 EUSurvey, mentioned by 37% (7) of respondents, was considered the least valuable ISA action by those who answered^{89,90}, easily distancing the

⁸⁹ Better Regulation "Toolbox", complementing the Better Regulation Guidelines presented in in SWD(2015) 111; Tool #23: ICT assessment, the digital economy and society, European Commission, Strasbourg, 19.5.2015.

second least valuable action, action 5.01 Monitoring and Evaluation, which was cited by 26% (5) of respondents. Although the latter action is indeed needed as part of the programme management as a support activity, when taken on its own by respondents, it was not perceived as contributing, as such, to delivering electronic public services supporting the implementation of EU policies and activities. Nevertheless, the evaluation considers this activity to be of fundamental importance to provide insight into the programme's performance as proven by the desk research presented in the subsection 3.6.2.

With regard to the most and the least valuable actions, some respondents noted that it is difficult to have the overview of all the actions to be able to knowledgeably state which ones were valuable and which were not. It is clear from the low numbers of answers to the questions on the most valuable (32) and least valuable (19) that this posed a challenge for respondents. However, with two-thirds more answers on the former question than the latter, it would suggest that more stakeholders considered the ISA programme and its actions to be more valuable than those who did not.

3.4.1.3 Translation of needs into ISA solutions

Subsequent findings to similar questions reinforce this view. Member States' representatives and EC officials who participated in the online surveys and interviews largely agreed that needs expressed by European public administrations have been successfully translated into ISA solutions. 12% (12) fully agreed and 54% (53) somewhat agreed whereas 7% (6) somewhat disagreed, 13% (13) neither agreed nor disagreed and 14% (14) did not express an opinion.

Comments from the interviews generally acknowledge the ISA programme's success at translating needs expressed by European public administrations into solutions but offer some caveats. One official, who somewhat agreed, opined that some European public administrations sometimes struggle to express their needs, rendering it difficult for the ISA programme to translate the needs into solutions. Another official, who somewhat disagreed, said that the ISA programme successfully translated needs into actions but not into solutions, adding that, in his view, there had not been enough delivery in several ISA actions. Another official fully agreed that the needs of European public administrations had been successfully translated into ISA solutions but that they were not sufficiently reused.

3.4.1.4 Support the implementation of EU policies

Furthermore, the evaluation team conducted desk and field research on EU public policies and

⁹⁰ It is important to note that for this question the total number of responses was 19; therefore these results should be interpreted with caution.

activities that were supported by the ISA programme. Recital 2 of the ISA legal decision⁹¹ recalls the European Council’s conclusion that “*more focused, effective and integrated policies regarding information and communication technologies (ICT) at both European and national levels are essential to achieving the goals of economic growth and productivity*”. The Commission “*was invited to encourage the efficient use of ICT in public services through the exchange of experience and to develop common approaches on key issues such as interoperability and effective use of open standards*”.

The Commission considers the cross-border interoperability of online services and the digitalisation of European public administrations to be important factors for growth and increased efficiency. It has consistently demonstrated its commitment to interoperability solutions over a remarkably long period⁹².

The table below provides an overview of how the ISA programme advances or is implementing other EU initiatives, legislation or funding tools, which, in turn, provide interoperable solutions for policy challenges at both national and European levels. In June 2014, the Commission adopted a proposal for the successor of the ISA programme, ISA², the objectives of which are to capitalise and expand on the results of the ISA programme’s contribution to the advancement of EU policies, such as those listed below.

Table 19 ISA and related other EU initiatives, legislation or funding tools

Type	Name	Policy Area	Contribution of ISA	DG(s)
Initiative	Digital Agenda for Europe ⁹³ (DAE)	ICT/Single Market	<ul style="list-style-type: none"> ISA has a clear link to support Digital Agenda actions 3, 8, 23, 24, 25, 26, 77, 84, 88 and 89⁹⁴. 	DG CNECT
Initiative	Connecting Europe Facility ⁹⁵ (CEF)	ICT/Single Market	<ul style="list-style-type: none"> Services developed by ISA to an operational level can then be integrated into and run by the CEF programme. 	DG CNECT

⁹¹ Decision N° 922/2009/EC of the European Parliament and of the Council of 16 September 2009 on interoperability solutions for European public administrations (ISA), O.J. L260/20, 03.10.2009, Brussels.

⁹² As noted in chapter 1, in 1995, the Interchange of Data between Administrations (IDA) programme was established to promote the development and operation of trans-European telematic networks for data interchange between Member State administrations and/or EU institutions. It ran from 1995 to 1999.

⁹³ Digital Agenda for Europe.

⁹⁴ Refer to section 5.3 of the interim evaluation of the ISA programme.

⁹⁵ Connecting Europe Facility (CEF).

Type	Name	Policy Area	Contribution of ISA	DG(s)
Initiative	Digital Single Market (DSM)	ICT/Single Market	ISA supports the DSM in the following ways: <ul style="list-style-type: none"> • Support the implementation of the IMI Regulation; • Supported Your Europe; • Support the implementation of the Services Directive (Points of Single Contact (PSC)); • Support the implementation of the Business Registers Interconnection System (BRIS) Regulation (company law); • Support actions relating to e-Procurement & e-Invoicing; • Single European Procurement Domain (SEPD); and • eInvoicing Standard. 	DG GROW
Initiative	European eGovernment Action Plan 2011-2015 ⁹⁶	ICT/Single Market	ISA has a clear link to support European eGovernment action plan actions 12, 15, 21, 25, 32, 33 and 34.	All
Initiative	Commission IT Rationalisation Initiative	All	ISA provides tools for internal coordination: Trans-European Solutions (TES), EIRA and EUCart.	All
Legislation	eIDAS ⁹⁷	ICT/Single Market	ISA cooperates with the Electronic identification and trust services (eIDAS) task force and supports the implementation of the regulation ⁹⁸ .	DG CNECT
Legislation	Open Data & Public Sector Information (PSI) ⁹⁹	ICT/Single Market	ISA's semantic standards, and in particular Asset Description Metadata Schema (ADMS) ¹⁰⁰ , eGovernment core vocabularies ¹⁰¹ and linked data technologies support this.	DG CNECT Publications Office DG ESTAT
Legislation	European multi-stakeholder platform on ICT standardisation ¹⁰² (ICT Standardisation ¹⁰³)	ICT	ISA supports the ICT Standardisation initiative with the following results: <ul style="list-style-type: none"> • ADMS; • eGovernment core vocabularies; • Common Assessment Method Standards and Specifications (CAMSS)¹⁰⁴. <p>Furthermore, Regulation (EU) No 1025/2012 on European standardisation refers to interoperability as an essential outcome of standardisation to encourage the use of, or require compliance with, relevant technical specifications at Union level in order to ensure interoperability in the single market and improve freedom of choice for EU users in the field of ICT. ISA clearly supports this.</p>	DG GROW DG CNECT

⁹⁶ European eGovernment Action Plan 2011-2015.

⁹⁷ Regulation (EU) N°910/2014 on electronic identification and trust services for electronic transactions in the internal market (Regulation located in OJ L 257, 28.8.2014, p. 73–114).

⁹⁸ Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC. (Regulation located in OJ L 257, 28.8.2014, p. 73–114).

⁹⁹ Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (Located in OJ L 345, 31.12.2003, p. 90–96).

¹⁰⁰ Asset Description Metadata Schema (ADMS) on Joinup.

¹⁰¹ eGovernment Core Vocabularies on Joinup.

¹⁰² Commission Decision of 28 November 2011 setting up the European multi-stakeholder platform on ICT standardisation (Decision located in OJ C 349, 30.11.2011)

¹⁰³ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council Text with EEA relevance (OJ L 316, 14.11.2012, p. 12–33). (Regulation located in OJ L 316, 14.11.2012, p. 12–33).

¹⁰⁴ CAMMS webpage.

Type	Name	Policy Area	Contribution of ISA	DG(s)
Legislation	Infrastructure for Spatial Information for Europe Directive (INSPIRE) ¹⁰⁵	Environment	ISA supports the implementation of INSPIRE directive with the actions: <ul style="list-style-type: none"> INSPIRE reference platform (ARE3NA). European Union Location Framework (EULF). 	DG JRC
Legislation	European Legislation Identifier (ELI) ¹⁰⁶	Justice	ISA supports the implementation and facilitates the adoption of the ELI building block for the interoperability and exchange of legislation data in Europe.	Publications Office
Legislation	State Aid Modernisation ¹⁰⁷	State Aid	ISA supports the development of GENIS – Generic Interoperable Notification Services for exchange of information between Member States and the EC.	DG COMP
Legislation	Common Information Sharing Environment (CISE) ¹⁰⁸	Maritime surveillance	ISA supports the establishment of a Common Information Sharing Environment (CISE) through the semantic alignment of different data models.	DG MARE & all DGs involved in the maritime domain
Legislation	European Citizens' Initiative (ECI) ¹⁰⁹	All	ISA supports the European Citizens' Initiative with the following tools: <ul style="list-style-type: none"> Establishment of the Online Collection software (OCS), a tool for online data collection; Development of a Crypto Tool; Development of a Validation Tool. 	SG DG DIGIT
Funding Tool	ICT Policy Support Programme under the Competitiveness and Innovation Framework Programme (CIP) ¹¹⁰	ICT/Single Market Justice	ISA supports the ICT Policy Support Programme with the following means: <ul style="list-style-type: none"> Electronic Simple European Networked Services (e-SENS)¹¹¹. e-CODEX: Provision of services e-Justice, e.g. STORK sustainability, ECAS-STORK integration, e-Trustex and the tools developed for the e-CODEX LSP. 	DG CNECT DG JUST Publications Office
Funding Tool	European Structural and Investment Funds (ESIF) ¹¹²	All	ISA supports the European Structural and Investment Funds (ESIF) with the following activities: <ul style="list-style-type: none"> Conducted large scale interservice consultations within the ISA unit to provide opinions and comments to the Countries' Operational Programmes. Provided input on KPIs, advice on interoperability policy and on evaluation of national programmes on interoperability. Provided an overview on ISA actions contributing to ESIF Thematic Objective 2 and TO 10 for 20 European Countries 	DG EMPL DG REGIO DG MARE

¹⁰⁵ Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (Directive located in OJ L 108, 25.4.2007, p. 1–14).

¹⁰⁶ European Legislation Identifier (ELI).

¹⁰⁷ Related to GENIS – Generic Interoperable Notification Services.

¹⁰⁸ Common Information Sharing Environment (CISE).

¹⁰⁹ REGULATION (EU) No 211/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 February 2011 on the citizens' initiative (Located in OJ L 65, 11.3.2011, p. 1–22).

¹¹⁰ Decision No 1639/2006/EC of the European Parliament and of the Council of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme (2007 to 2013) (Decision located in OJ L 310, 9.11.2006, p. 15–40).

¹¹¹ E-SENS.

¹¹² European Structural & Investment Funds.

As mentioned in the recent Communication on the Digital Single Market Strategy (DSM), cross-border interoperability can contribute to the modernisation of public administrations. Modernising public administrations at all levels (between the different layers of government) was one of the five main priorities at EU level set out in the Annual Growth Survey 2014¹¹³.

Therefore, the evaluation verified how the ISA programme, being one of the contributors to the modernisation of public administrations, has contributed to this area as well. With regard to the overall numbers for Member States' representatives and EC officials who participated in the online survey and interviews, 41% (40) fully agreed and 46% (45) somewhat agreed that the ISA programme contributed to the modernisation of the public sector in Europe. 4% (4) somewhat disagreed, 6% (6) neither agreed nor disagreed and 3% (3) did not express an opinion.

In addition, respondents offered different types of comments on the ISA programme's contribution to the modernisation of the public sector in Europe. The majority of the 12 respondents who commented said that the ISA programme was an enabler of the modernisation of the public sector in Europe given how it is trying to ensure that interoperability and the programme's solutions can enhance the operation of European public administrations. However, several respondents said that the ISA programme could do more to promote itself to contribute to this and that interoperability was only one part of this large question.

The interview and survey respondents largely considered that the ISA programme contributed to the modernisation of the public sector in Europe. Nevertheless, the desk research has identified the following barriers that the follow-on programme should address. These include¹¹⁴:

- Legal and political – lack of availability of enforcement measures, etc.
- Organisational – size of Member State, institutional complexity, lack of resources (time, budget, skills), etc.
- Technical – legacy, replacement of the older systems, etc.
- Other – lack of visibility of existing solutions, language, lack of information/documentation, lack of trust, lack of technical and semantic interoperability, etc.

The ISA programme has acknowledged these barriers and aimed to overcome them by establishing initiatives such as European Interoperability Reference architecture and EU cartography in order to support the European public administrations in their further modernisation. These initiatives aim to accelerate the design of the support systems of digital

¹¹³ Opinion of the European Economic and Social Committee on the 'Communication from the Commission — Annual Growth Survey 2014' COM(2013) 800 final (Opinion located in OJ C 214, 8.7.2014, p. 46–54).

¹¹⁴ Margarida Abecasis, A holistic approach to the modernisation of European public administrations: E-Government conference, Athens, 30.09.2014.

public services; to provide a reference model for comparing existing architectures, to help document the most salient interoperability elements, to facilitate the sharing of reusable solutions and to ease the discovery and reuse of interoperability solutions (e.g. via EUCart in Joinup website). Furthermore, the evaluation acknowledges that the ISA programme has contributed to the modernisation of public administrations area through the action 4.2.03 NIFO.

In this respect, since 2013, the ISA programme, through action 4.2.03 NIFO, focused on the identification of existing or new ISA actions that have the potential to contribute to the European Structural and Investment Fund (ESIF) Thematic Objective (TO) 2 “enhancing access to, and use and quality of ICT” and TO 11 “enhancing institutional capacity of public authorities and stakeholders and efficient public administration”. One of the objectives of the ESIF is to support Member States' efforts to improve the quality of public administration and governance by a provision of funds to acquire the necessary administrative and institutional capacities to support their structural reforms.

3.4.2 Use of the ISA solutions by Member States

As previously mentioned, the adoption and use of the ISA programme's solutions by Member States' administrations is voluntary. Consequentially, Member States' representatives and EC officials were questioned about the use of ISA solutions by Member States. Out of a total of 98 respondents, 8% (8) fully agreed and 46% (46) somewhat agreed that the results obtained by the ISA programme are currently used by Member States. 1% (1) fully disagreed and 12% (12) somewhat disagreed. 19% (18) neither agreed nor disagreed and 13% (13) did not express an opinion.

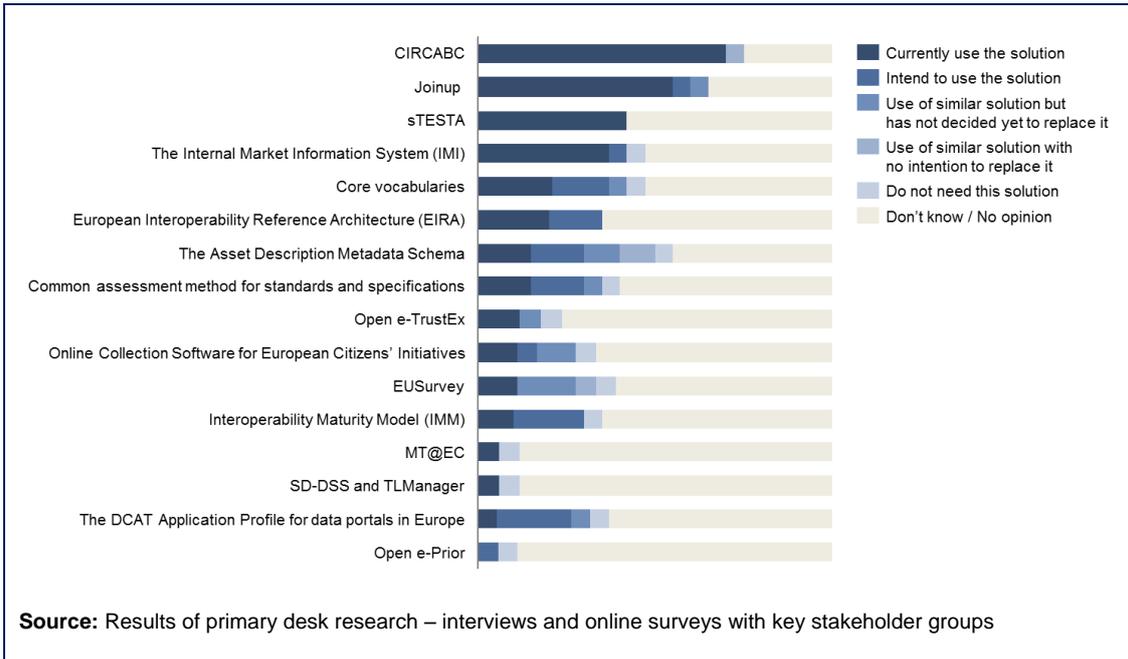
In the course of the online surveys, Member States representatives were also asked more precisely, based on a predefined list of ISA solutions¹¹⁵, to choose one of the following options to indicate whether their own country:

- is currently using [the proposed] ISA solution (option 1); or
- intends to use [the proposed] ISA solution in 2015/2016 (option 2); or
- uses a similar solution but intends to replace it by [the proposed] ISA solution (option 3);
or
- uses a similar solution but has not yet decided to replace it (option 4); or
- uses a similar solution but does not intend to replace it by [the proposed] ISA solution (option 5); or
- does not need [the proposed] ISA solution (option 6).

The figure below presents, for each ISA solution, the number of times each of the aforementioned options was selected by the Member States' representatives responding to the survey.

¹¹⁵ The predefined list of ISA solutions.

Figure 24 Use of ISA solutions by Member States



It is the perception of the survey respondents that the ISA solutions most reused by Member States are the following: action 2.05 CIRCABC (14 occurrences), action 4.2.01 Joinup (11 occurrences) and action 2.04 sTESTA (8 occurrences). Action 1.07 Open e-Prior is the only ISA action that is currently not being used by any of the surveyed Member State representatives. However, it is important to note that there is a negative correlation between the level of use of an ISA action and the occurrence rate of 'Don't know / No opinion' responses regarding that action. Thus, the low levels of reuse of these actions, that survey respondents perceive, could partially be explained by low levels of awareness at individual or Member State level.

Several Member States intend to use an ISA solution in 2015/2016. In this regard, the ISA actions with highest occurrence rates are: the DCAT Application Profile for data portals in Europe (4 occurrences), ADMS (3 occurrences), Core vocabularies (3 occurrences) and action 4.1.02 Interoperability Maturity Model (IMM) (3 occurrences). However, the aforementioned ADMS can also be considered as the ISA action with lowest likelihood of being reused in the future by Member States as it has the highest occurrence rate for the Option 5 and Option 6 (3 occurrences), i.e. classifying the solution as not intended to be used or as not needed.

Given that it is not sufficient to rely solely on the varying levels of knowledge of interviewees and online survey respondents when discussing a topic as objective and as important as reuse, the evaluation team complemented the aforementioned findings with desk research. This triangulation exercise completed the overview of the ISA solutions that are reused by Member States. In this regard, the evaluation confirms that 15 ISA solutions are actually being reused by Member States. A precise description of these solutions is available in subsection 3.3.2.

However, the table below provides an overview of the level of adoption of each of these aforementioned solutions by Member States.

Table 20 Level of adoption of ISA solutions by Member States

ISA solutions	Level of adoption at national level
CIRCABC	CIRCABC is used by all EU Member States as a service.
Joinup	Joinup is used at national level although the platform has not yet been reused by any Member States to set up a national collaborative platform (only reused by Australia and New Zealand as well as by Vietnam, in testing phase). That said, the main purpose of Joinup, an accompanying measure, is to serve as a platform to disseminate and share information, materials and solutions among European public administrations rather than to be adopted per se.
sTESTA	sTESTA is used by all EU Member States as a service for multiple policies. In addition, the sTESTA network is used by 21 initiatives in the following 11 Member States and one other EEA Member States: <ul style="list-style-type: none"> • Estonia (3 initiatives) • Finland (3 initiatives) • Lithuania (3 initiatives) • Netherlands (2 initiatives) • Spain (2 initiatives) • United Kingdom (2 initiatives) • Czech Republic (1 initiative) • Cyprus (1 initiative) • Germany (1 initiative) • Italy (1 initiative) • Poland (1 initiative) • Norway (1 initiative).
Internal Market Information System (IMI)	The IMI System connects users from all EEA countries, i.e. all 28 EU Member States and Norway, Lichtenstein and Iceland.
Core vocabularies	The core vocabularies are used in eight initiatives at national and local levels.
Asset Description Metadata Schema (ADMS)	The ADMS is used by the German XRepository initiative at national level.
Common assessment method for standards and specifications (CAMSS)	The CAMSS is used by the Statens Serum Institut in Denmark.

ISA solutions	Level of adoption at national level
Open e-TrustEx	<p>Open e-TrustEX is used in production in the following 13 Member States:</p> <ul style="list-style-type: none"> • Austria (Bundesrat); • Czech Republic (Senate); • Denmark (Folketing); • Finland (Prime Minister's Office); • France (SGAE, Permanent Representation); • Germany (Bundesrat); • Greece (Chamber of Deputies); • Hungary (Permanent Representation); • Latvia (Permanent Representation); • Netherlands (Eerste Kamer); • Portugal (Permanent Representation); • Spain (Permanent Representation); and • Sweden (Riksdagen; Permanent Representation). <p>Open e-TrustEX is under implementation in the following 7 Member States:</p> <ul style="list-style-type: none"> • Germany (Bundestag); • Finland (Permanent Representation); • France (Assemblée Nationale); • Hungary (National Assembly); • Italy (Camera dei Deputati); • Romania (Camera Deputatilor); and • Slovakia (Permanent Representation).
Online Collection Software (OCS) to support European Citizens' Initiatives (ECI)	The Online Collection Software (OCS) to support European Citizens' Initiatives has been used for 21 ECI initiatives launched in Europe so far.
Interoperability Maturity Model (IMM)	IMM has been used in Sweden and Greece.
MT@EC	The MT@EC is used by the following Member States: Austria, Belgium, Bulgaria, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the UK.
EIRA	A pilot of EIRA was used by three Member States; Denmark, Estonia and the Netherlands. However, the solution is currently the subject of a public consultation and is not yet a fully finished product as a reusable solution.
DCAT Application Profile for data portals in Europe.	The DCAT Application Profile is used by initiatives from three Member States: Belgium, the Netherlands and Greece.
Open e-Prior	The Federal Government of Belgium is using Open e-Prior.
Re3gistry	Re3gistry is used by the following four Member States: Croatia, Italy, Slovakia; and Slovenia.

The evaluation emphasises that two other ISA actions have partially reached their objectives: ISA action 3.01 – Assessment of ICT implications of EU legislation and action 5.02 – EIS Governance support. As mentioned in the ISA Work Programme 2011¹¹⁶, the former action aimed at performing the following activities between 2010 and 2015:

¹¹⁶ ISA Work Programme First revision 2011 Annex to Section I Part 1, Detailed description of actions, European Commission, Brussels, 2011.

- 3 Pilot assessments Refinement of method and elaboration of tools in 2010-2011;
- 9-18 assessments with different Commission Services in 2011-2013; and
- 6-12 assessments with further Commission Services 2013-2015.

In reality no effort was allocated to this action between 2011 and 2012. The low adoption of the existing ICT implications assessment method (developed in 2010) indeed prevented the conduct of pilots or assessments with different Commission services. Taking into account this low uptake and the recent updates on the way legislation is prepared by the Commission (Better Regulation guidelines), the existing method was reviewed in 2013 and six assessments have been performed since that year¹¹⁷. The evaluation concludes that, overall, the action has been in the right direction since 2013 to reach part of its objectives but the expected results were not delivered in the period 2010-2012

With regard to the ISA action 5.02, one of the action's main objectives, as stated in the ISA Work Programme 2011, was that the EIS stays aligned with the EU political agenda and with the priorities and initiatives of the Member States regarding European Public Services and interoperability activities. While the EIS implementation review was performed in 2012, the revision of the strategy has not yet been conducted, putting into question the extent to which the strategy has remained aligned with these initiatives. The EIS aims now to be reviewed in 2015 and completed by 2016.

¹¹⁷ ICT assessment on the transfer of PNR data to non-EU countries (DG HOME), ECI Regulation (SEGGEN), Storage and exchange of criminal record information on third country nationals and stateless people (DG JUST), SIS II architecture (DG HOME), European Interoperability Strategy (DG DIGIT), Evaluation of the CBE Directive (DG MOVE).

3.4.3 Use of the ISA solutions by Commission DGs and other Institutions

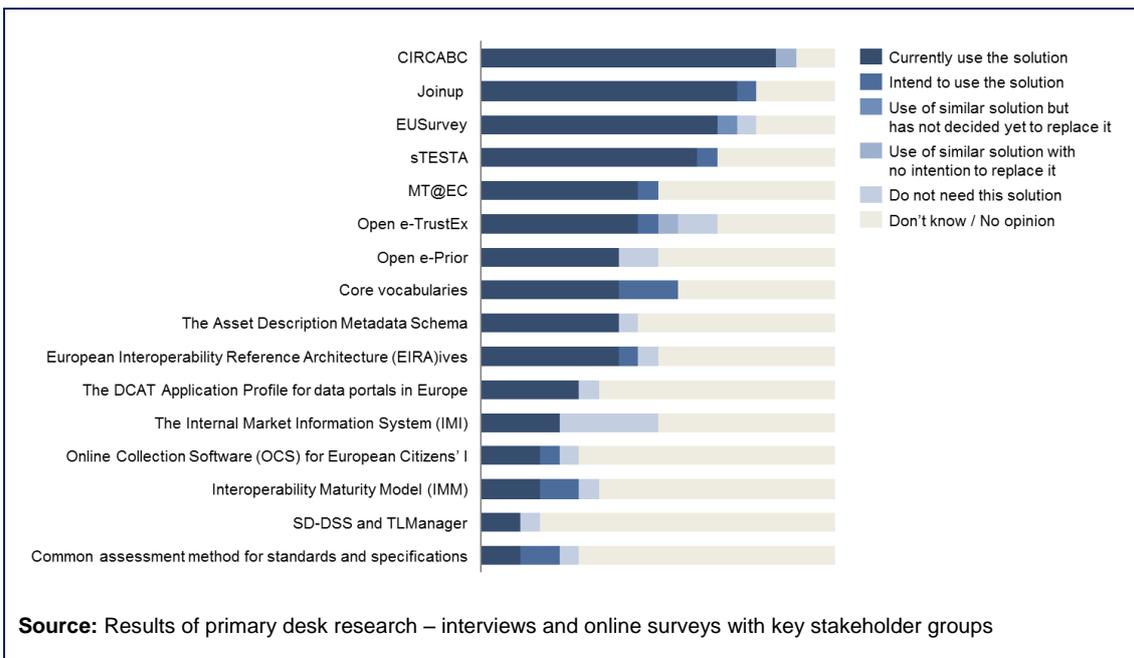
EC officials were questioned about the use of ISA solutions by their DGs. Out of 57 respondents, a majority fully or somewhat agreed, respectively 23% (13) and 44% (25), that the results obtained by the ISA programme were being used by their DGs. 4% (2) fully disagreed and 12% (7) somewhat disagreed. 11% (6) neither agreed nor disagreed and 6% (4) did not express an opinion.

In the online surveys, EC officials were also asked more precisely, based on a predefined list of ISA solutions, to choose one of the following proposals to indicate whether their own DG:

1. is currently using [the proposed] ISA solution; or
 2. intends to use [the proposed] ISA solution in 2015/2018; or
 3. uses a similar solution but intends to replace it by [the proposed] ISA solution; or
 4. uses a similar solution but has not yet decided to replace it; or
 5. uses a similar solution but does not intend to replace it by [the proposed] ISA solution;
- or
6. does not need [the proposed] ISA solution.

The figure below presents, for each ISA solution, the number of times each of the aforementioned proposals were selected by the EC officials responding to the survey.

Figure 25 Use of ISA solutions by Commission's services



It is the perception of the survey respondents that the ISA solutions most reused by Commission's services are: action 2.05 CIRCABC (15 occurrences), action 4.2.01 Joinup (13 occurrences), action 2.06 EUSurvey (12 occurrences) and action 2.04 sTESTA (11 occurrences). However, it is important to note that there is a negative correlation between the level of use of an ISA action and the occurrence rate of 'Don't know / No opinion' responses regarding that action. Thus, the low levels of reuse of these actions, that survey respondents perceive, could partially be explained by low levels of awareness at individual or EC DG/service level.

On the other hand, ISA actions perceived as currently the least used show the highest levels of intended use in 2015/2016, i.e. Core vocabularies (3 occurrences for Proposal 2), action 2.02 CAMSS (2 occurrences for Proposal 2) and action 4.1.02 IMM (2 occurrences for Proposal 2). Similarly, ISA actions with higher levels of current use show lower levels of intended use for 2015/2016 by Commission's services. In contrast to that, actions with lowest perceived current use are scoring highest occurrence rates for Proposal 6, i.e. no intention to use the ISA action. The actions with highest occurrence rates for Proposal 6 are: action.1.10 IMI (5 occurrences), action 1.07 e-Prior (2 occurrences) and action 1.08 e-TrustEx (2 occurrences). The evaluation team notes that it is normal that certain or some EC services do not foresee a use for action 1.10 IMI or Open e-Prior developed under ISA action 1.07 since they are not the target.

With regard to action 1.07, all DGs (73 Commission Services¹¹⁸) already use ePrior as several EC processes are based on this. As well as the ePrior service for all DGs, a tool, Open ePrior, was developed for European public administrations during the course of the ISA programme to boost the use of eProcurement by enabling them to connect to the PEPPOL network easily by making use of the e-PRIOR platform.

Given that it is not sufficient to rely solely on the varying levels of knowledge of interviewees and online survey respondents when discussing a topic as objective and as important as reuse, the evaluation team complemented the aforementioned findings with desk research. This triangulation exercise completed the overview of the ISA solutions that are reused by Commission DGs and services. In this regard, the evaluation confirms that 14 ISA solutions as currently used by European Commission DGs and services.

A precise description of these solutions as well as details on the DGs and services using them are available respectively in Table 21 with further details included in the Annex. However, the table below provides an overview of the level of adoption of these aforementioned solutions by European Commission DGs and services.

¹¹⁸ Based on the ISA Dashboard results as of March 2015: <http://ec.europa.eu/isa/dashboard/node/15470/effectiveness>.

Table 21 Level of adoption of ISA solutions by Commission's services

ISA solutions	Level of adoption by Commission's services
CIRCABC	CIRCABC is used by all Commission DGs and by most of the Commission's services ¹¹⁹ .
Joinup	Joinup is used by most of the Commission's services.
EUSurvey	EUSurvey is used by most of the Commission's services.
sTESTA	The sTESTA network is used by 86 networks at European Commission level (22 Commission's services and 2 at the EU level).
e-TrustEx	E-Trustex is used by five Commission's services: <ul style="list-style-type: none"> • DG COMP; • DG DIGIT; • DG JUST; • DG SG; and • Publications Office.
MT@EC	The operational online systems that use MT@EC are currently being used by the following four Commission's services: <ul style="list-style-type: none"> • DG GROW • DG DIGIT; • DG JUSTICE; and • Publications Office. Platforms of the following two Commission's services accept MT@EC: <ul style="list-style-type: none"> • DG SANCO; and • DG DIGIT. The following three Commission's services are developing their use of MT@EC: <ul style="list-style-type: none"> • DG DIGIT; • DG MOVE; and • Publications Office.
e-Prior	E-Prior is used in production of 51 initiatives in 37 Commission's services and 14 EC services.
EIRA	A pilot of EIRA is used in three Commission's services; DG CNECT (e-SENS), DG DIGIT and DG MARE. However, the solution is currently the subject of a public consultation and is not yet a fully finished product as a reusable solution.
Core vocabularies	The core vocabularies have been used in the framework of the e-Codex initiative.
Asset Description Metadata Schema (ADMS)	The ADMS has been used by the following two initiatives from the EC: <ul style="list-style-type: none"> • Joinup; and • The Metadata Registry of the Publication Office.
DCAT Application Profile for data portals in Europe	The DCAT Application Profile is used by: <ul style="list-style-type: none"> • the CEF pan-European data portal; and • the Open Data Support project (DG CNECT).

¹¹⁹ The evaluation team confirms that only four EC services, Central Library, European Political Strategy Centre (EPSC), Historical archives and the Legal Service (SJ) do not use CIRCABC.

ISA solutions			Level of adoption by Commission's services
The Internal Market Information (IMI) System			<p>The IMI System is used for 9 legal areas covering policy in the following DGs with more being planned:</p> <ul style="list-style-type: none"> • DG GROW; • DG EMPL; • DG ECFIN; • DG MOVE; • DG CNECT; and • DG SANTE.
SD-DSS and TLManager			SD-DSS and TLManager was used by the eJustice portal (DG JUST).
Re3gistry			Re3gistry is used by EC DG JRC.

Considering that the other European Institutions also belong to the group of targeted users of the ISA solutions, the use of ISA solutions by other EU institutions was verified.

In that regard, the evaluation identifies the following five ISA solutions that are currently used by other EU institutions:

- sTESTA, which is used by 27 networks from 22 other EU institutions.
- CIRCABC, which is used by is used by 45 other European institutions including the European Parliament, the Court of Justice of the EU and the European External Action Service (EEAS).
- Open e-Prior, which is used in production of 26 initiatives from other EU institutions.
- EUSurvey, which is currently used by the European Parliament, the European Council and the Court of Auditors.
- MT@EC, which is being used by the following eight other EU institutions: Court of Justice of the EU, Committee of the Regions, Council of the European Union, Economic and Social Committee, European Central Bank, European Investment Bank, European Parliament and the Translation Centre.

3.4.4 Reuse of ISA solutions available on the Joinup platform

Further desk research, using data analytics from the Joinup website, has been performed in order to verify whether the reuse of solutions improves over time. Joinup is a collaborative platform developed by the European Commission and funded by the ISA programme. It offers services that aim to help e-Government professionals to share their experience with one another. In particular, it allows users to download interoperability solutions (not only the ones funded by ISA), including free and open source solutions, code lists and specialised vocabularies of re-usable metadata.

The Joinup platform itself only measures the number of downloads, and therefore another tool, Google Analytics platform, was used to enable us to obtain this data in a periodical way, meaning that the evaluation team was able to identify the number of views/downloads that there has been at a certain point in time¹²⁰. Given the availability of the data, the evaluation team has decided to use the number of views and downloads per ISA action as a proxy for the level of reuse of the individual ISA action. As displayed below, overall the evaluation can conclude that the trend of change in reuse of the ISA actions has been positive for the years on which the data is available; i.e. three and two years respectively. The vast majority of actions' daily number of views and downloads has increased rather than decreased as compared to the previous year. Moreover, the positive trend of the slope continues to increase on a yearly basis (as based on the linearly extrapolated data on number of views). The most downloaded ISA solutions are DSS (Digital Signature Services), DCAT Application profile and EIRA.

¹²⁰ The only limitation to the extent of the available data was that the module of Google Analytics counting the views has only been implemented as of 24 May 2013 on Joinup, and the module counting the downloads, as of 25 February 2014.

Figure 26 Number of views extrapolated to daily averages per year¹²¹

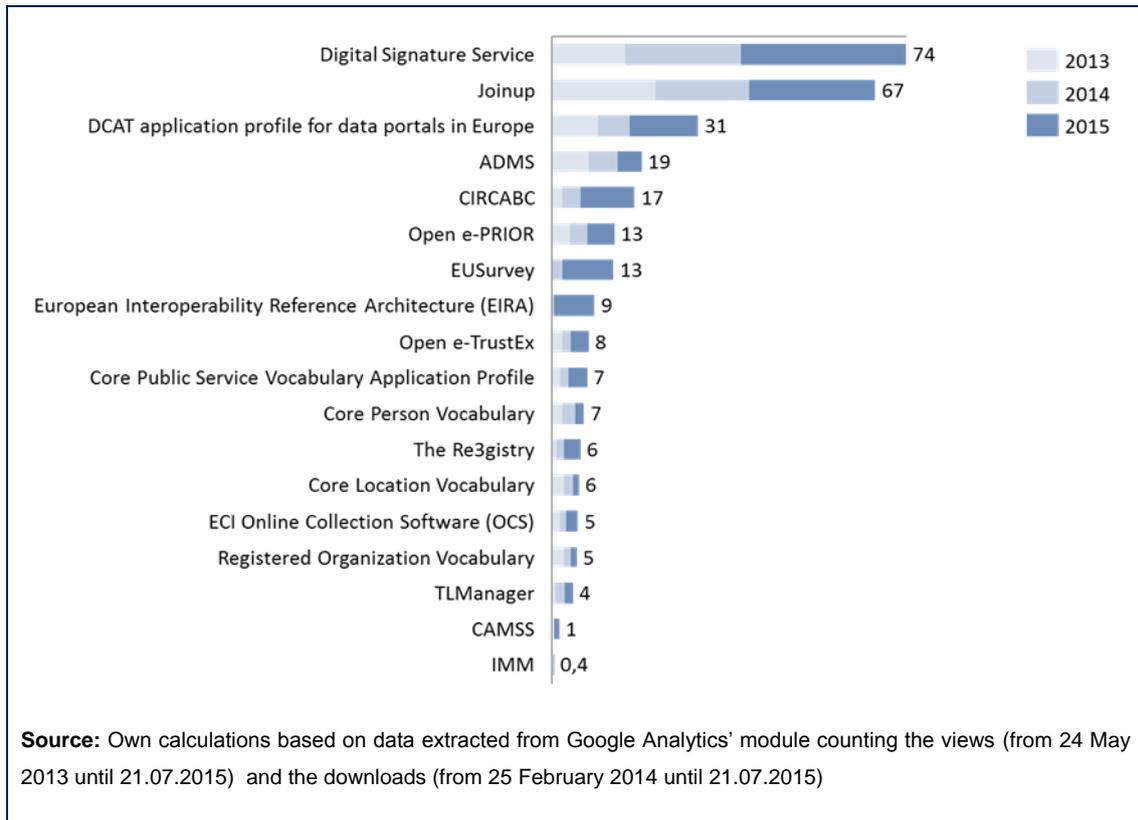
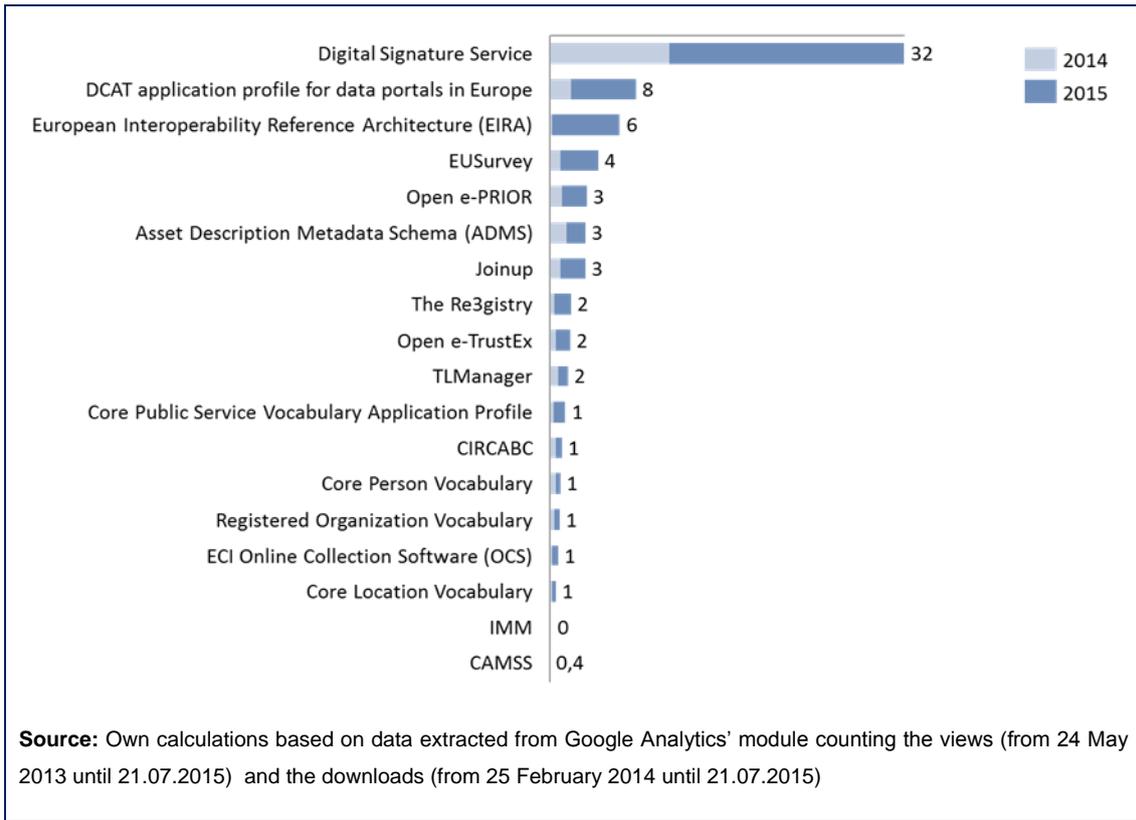


Figure 27 Number of downloads extrapolated to daily averages per year

¹²¹ The data have been estimated through a method of linear extrapolation in order to calculate the daily averages per each year as the data for the entire year have not been available. Linear extrapolation is a method used to estimate the value of missing observations of a variable given characteristics of the original scope of the data.



3.4.5 *Measures to improve the utility of the ISA programme*

Although it is clear that the overall benefits generated by the ISA programme are positive, there is scope for improvement in the utility of certain actions, which would lead to a greater level of reuse of their solutions and increase their impact. While large majorities of respondents named benefits delivered by the ISA programme to their countries (96%), stated that the ISA programme contributed to the modernisation of the public sector in Europe (87%) and that the needs expressed by European public administrations have been successfully translated into ISA solutions (66%), the analysis identifies several measures, elaborated below, to increase the utility of the ISA programme and its successor, the ISA² programme, for its stakeholders.

Member States' representatives and EC officials were asked to reflect on several measures that could be used to improve the utility of the ISA programme. A total number of 38 survey respondents expressed the extent of their agreement on the likelihood of the following seven measures:

- Measure 1: Improvements in the clarity of priorities of the ISA programme
- Measure 2: Improvements in the coordination of national initiatives on interoperability
- Measure 3: Improvements in the coordination of EU initiatives on interoperability
- Measure 4: Greater degree of involvement of the Member States in the process of development of initiatives on interoperability
- Measure 5: Greater degree of involvement of Commissions DGs and services in the process of development of initiatives on interoperability
- Measure 6: Better targeting of the communication activities to stakeholders
- Measure 7: Improvement of the usability of the ISA programme solutions (e.g. via provision of a clearer set of rules of use)

First of all, it is important to note that, the overall majority of respondents fully or somewhat agreed that any of these changes would improve the programme. The survey respondents fully or somewhat agreed (77% (33)) the most that Measure 3: Improvement in the coordination of EU initiatives on interoperability would improve the ISA programme. Measure 5: Greater degree of involvement of Commission DGs and services in the process of development of initiatives on interoperability and Measure 1: Improvements in the clarity of the priorities of the ISA programme are the second and the third most popular measures among online survey respondents to improve the programme based on respondents' opinions.

Interestingly, significant differences in the opinions of the Member States' representatives and EC officials emerged on the positive side of the scale (the highest levels of agreement). The Member States' representatives fully and somewhat agreed the most that Measures 3, 1 and 4 would improve the programme, whilst Measures 5 and 3 recorded the highest levels of agreement among EC officials. Nevertheless, all of the measures recorded high levels of

affirmation for their perceived likelihood to improve the programme, with agreement levels of at least 60% for each.

None of the measures recorded a significant level of disagreement in terms of its potential contribution to the improvement of the ISA programme, however Measure 7: Improvement of the usability of the ISA programme solutions prompted the highest level of uncertainty among respondents. 24% (9) of respondents neither agreed nor disagreed on its potential to improve the ISA programme and it recorded the lowest level of agreement on the same issue of all measures. It can be further noted that both Member States' representatives and EC officials show low levels of disagreement and uncertainty about the likelihood of any of the measures to improve the performance of the programme.

As part of both interviews and surveys, the respondents were asked to share further comments or ideas on other measures that could be used to improve the ISA programme and the benefits of the programme. The results of these open-ended questions reaffirmed aforementioned findings on Measures 1-7; with only the conceptual basis of Measure 7 (i.e. the improvement of the usability of the ISA programme solutions) being mentioned by one respondent.

Two out of three most frequent measures are stakeholder-orientated, whilst the third most often mentioned measure is about to the programme's specifications itself. The first stakeholder-orientated measure to improve the ISA programme is to promote it better. Respondents believed that an intensification of the promotion of the programme (via means of workshops, networking activities, etc.) would raise the awareness of ISA's actions/results and best practices, which is believed to be the most necessary. Greater involvement of Member States, Commission DGs, citizens and businesses, is also regarded with utmost importance to improve the benefits of the ISA programme as the second most frequent measure.

On this point, the evaluation notes that the ISA programme does not coordinate, in a systematic way, with Commission DGs and services that run sectoral programmes and their committees of national Member States' representatives, within which many cross-sector and/or cross-border services are managed and to which interoperability could greatly contribute. A notable exception to this relates to the work done for action 3.01 Assessment of ICT implications, where the ISA programme was involved in meetings with DG CLIMA, DG JUST, DG HOME and the ECI expert group on an ad-hoc basis. Although more needs to be done in this regard, it is important to note, that as according to the desk research in subsection 3.7.3, the ISA programme has participated in three times as many EC events since the interim evaluation than before it and that 66% of all ISA events involving Member States have taken place after this time. Therefore, the networks and awareness probably exist for this to happen in a structured way.

Lastly, the third most frequently mentioned measure aims to prioritise the ISA actions based on a constant monitoring of the benefits that they produce for the programme, as well as their relevance to the programme's objectives / stakeholders' needs. As a result, exclusion of (or

alternatively also inclusion of new) actions could occur in order to improve the overall performance of the programme and increase its overall impact. The evaluation confirms that efforts were invested by the programme on this aspect through the monitoring & evaluation activities (action 5.01) but that it is unlikely that the respondents have enough visibility on how the programme has leveraged monitoring & evaluation results for decision-making purposes. The programme has regularly presented monitoring & evaluation results to the ISA management committees but the focus was probably more on the performance of the actions, rather than the achieved benefits and relevance of each individual actions.

Further results of respondents' input reflected the results that were summarised previously in this section; improvements in the communication with stakeholders and better alignment of the ISA programme with other related EU initiatives were frequently mentioned by interviewed and surveyed stakeholders. However desk research shows that the ISA programmes' activities are already putting some of these measures into practise. In addition to the links to other related EU initiatives mentioned above and coordination with stakeholders in section 3.7, section 3.6.3 provides further details on the considerable amount of synergies and links between the different actions of the ISA programme based on desk research on the synergies and existing links with other EU initiatives from the analysis of interviews and surveys.

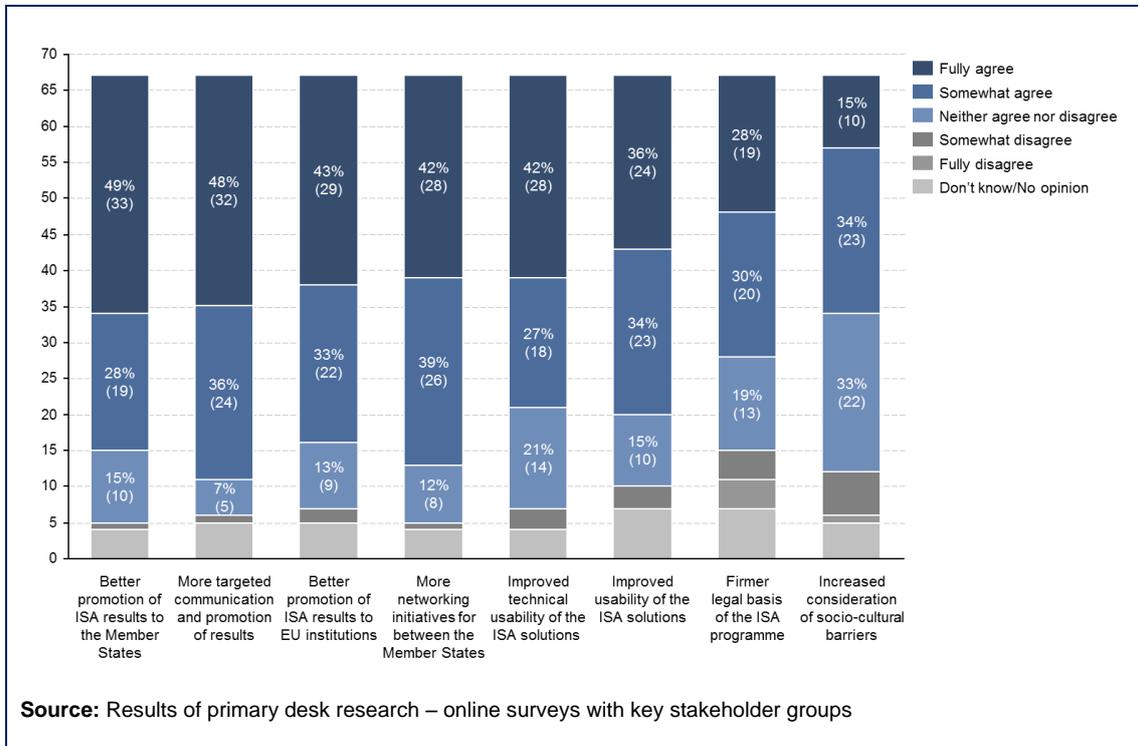
A measure not previously mentioned, raised by four respondents, is the need to provide more human and financial resources related to the administration of the programme; for example, to support its operations such as Working Group meetings. Several further measures appeared in the responses with lower, but nevertheless significant, frequency. For instance, these measures would aim to focus more on improvements in the programme's coordination (e.g. clearer objectives) or to strengthen its legal basis in order to improve adoption/implementation rates.

As previously mentioned, two of three key measures that would improve the utility of the ISA programme are directly stakeholder-orientated. For this reason, it would be beneficial for the evaluation to further explore the desired methods of improving the benefits of the ISA programme for its direct beneficiaries, i.e. European public administrations at EU and national level.

EC officials and Member States' representatives believed that measures that enable greater awareness raising are regarded as being the most beneficial to European public administrations. More specifically, 84% of respondents (56) fully or somewhat agreed that better promotion of the ISA solutions through recommendations of reusable building blocks or packaged solutions would improve their benefits. 78% of respondents (54) fully or somewhat agreed that the benefits of the programme would be achieved by better promotion of ISA programme to Member States and 76% (52) fully or somewhat agreed that these benefits would be achieved by the promotion of the results of the ISA programme at the Commission and other EU institutions' level. 81% of respondents (54) fully or somewhat agreed on the need for support for more networking initiatives and best practice exchange between the Member States.

Awareness raising methods are clearly highlighted for their potential to improve the benefits of the ISA programme for European public administrations, as shown in the figure below.

Figure 28 The changes' potential to improve the benefits of the ISA programme



No major differences emerged in between the Member States' representatives and EC officials on this question. The greatest levels of support in both groups were for awareness raising changes, i.e. change 2 – 5; although with one minor exception. Change 6 (regarding improved technical usability) recorded an approximately 9% higher level of agreement/somewhat agreement among the EC officials' group compared to the Member States' representatives.

Furthermore, it should be stated that 58% of respondents fully or somewhat agreed that a firmer legal basis supporting the adoption and implementation of the ISA programme would improve the benefits of the ISA programme for European public administrations. 30% of stakeholders did not express a view on this or did not know. Only 12% of respondents either fully or somewhat disagreed.

3.4.6 Conclusions

The following box summarises the main findings related to EQ6: ‘How did the ISA programme's achieved and anticipated results and impacts compare with the business needs they intended to address?’ and EQ7: ‘Which measures could be taken to improve the utility of the next programme's actions?’

Conclusion N°8

The evaluation concludes that, overall, the achieved and anticipated results and impacts of the ISA programme largely address the business needs that they intended to. ISA solutions, which enable ‘the delivery of electronic public services supporting the implementation of EU policies and activities’ are used by up to all Member States, several Commission services and a handful of other EU institutions.

The analysis shows that some ISA actions have led to the production of 23 solutions. Of these 23 solutions; 15 are used by up to all Member States; 14 are used by several Commission services; and 5 are used by a handful of other EU institutions. The evaluation found that that 16 out of 18 ISA solutions available on Joinup have had higher numbers of daily downloads so far in 2015 than they had in 2014. For the two solutions that had lower numbers of downloads in 2015 than in 2014, the difference is less than 10% each.

Although these aforementioned solutions are linked to certain actions only, other actions have also produced results if not specifically related to solutions. For example, action 3.01 Assessment of ICT implications of new EU legislation has achieved its main objective as it has succeeded in being included in the formal Impact Assessment process, as part of the Better Regulation Guidelines, even though there were not so many assessments conducted during the ISA programme. In addition, while 5.02 EIS Governance Support was not seen by interview and survey respondents as having delivered substantially, it is important to note that, as part of the EIS revision, the interoperability governance organisation and processes are in the process of being established. This is seen as a fundamental opportunity to address these new evolving needs on governance and coordination and raise the perceived utility of this action. The ISA programme should, thus, reflect on the utility of its individual actions; by either strengthening their business cases as part of the wider programme or how they can individually best produce or contribute to any tangible solutions for core stakeholders.

The top three benefits delivered by the ISA programme to Member States' were considered to be the use of ISA solutions, the existence of the programme itself (to raise awareness about the importance of interoperability and to keep it on the political agenda) and the provision of reference points, such as the EIF¹²², supported by action 4.2.03 NIFO, networks and solutions, such as action 2.04 sTESTA and CIRCABC. In addition, the evaluation concludes that the ISA programme contributes to the modernisation of the public sector in Europe.

¹²² As noted in section 3.4.1, the evaluation notes that the impact of the EIF has not been fully achieved. The State of Play of Interoperability in Europe – Report 2014 found that while national interoperability frameworks (NIFs) are aligned with the EIF at a rate of 72%, the average implementation rate of the EIF at national level is 28%.

In addition, the evaluation notes that the ISA programme does not coordinate, in a systematic way, with EC DGs and services that run sectoral programmes, within which many cross-sector and/or cross-border services are managed and to which interoperability could greatly contribute. Nevertheless, the evaluation found that the ISA programme either supports or is linked to 15 EU initiatives, pieces of legislation or funding tools.

It is important to note that interviewees and online survey respondents perceived the levels of reuse of ISA solutions to be much lower/less widespread than is actually the case, as proven by the desk research. Although the trend from the number of views and downloads of solutions from Joinup suggests improvements in the overall levels of reuse over the period of time for which such data is available, i.e. from 2013 onwards, the levels of reuse of the solutions could be improved.

Conclusion N°9

Key stakeholders have low levels of awareness about major aspects of the programme, including whether solutions were used by Member States, EC Commission DGs/services or other EU institutions. The evaluation found that there is a number of reasons for this. These stakeholders may be from diverse public organisations or DGs with different levels of knowledge on policy areas or very technology focused rather than operational. Given that the ISA programme is so broad, it is to be expected that different stakeholders will have different perspectives, levels of interest, knowledge and appreciation of different actions. Increasing the awareness raising activities will not necessarily resolve these issues. Limited stakeholder resources within different European public administrations might be another reason for low engagement with many actions. Nevertheless, it is quite likely that these low levels of awareness have hindered the overall potential utility of the programme, which lends credence to the argument for measures that they identified to improve it, all of which had high levels of support from stakeholders of over 60%.

It is important to state that the low levels of awareness are confirmed, paradoxically, by the fact that the additional measures, which interviewees and survey respondents suggested, are all either in place or being developed or expanded as sections 3.6 and 3.7 outline.

The evaluation concludes, therefore, that the **follow-on ISA² programme should raise awareness about these existing measures and improve them by adapting them to the needs of targeted/specific stakeholders.**

3.5 Sustainability

The evaluation of the sustainability of the ISA programme is driven by the following evaluation question:

EQ8: 'To what extent is the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, ensured?'

The relevant evaluation question aims to cover the issue of sustainability through the analysis of the financial resources needed for the operation and the technical implementation of the ISA solutions after the end of the programme.

3.5.1 *Financial sustainability of the ISA Solutions*

For evaluation purposes, financial sustainability is the extent to which the benefits of the programme do not depend on continued EC programme/initiative funding.

The ISA programme and its predecessors have funded several solutions that required significant investment from the European Commission. Since the programme is coming to an end, it is essential that this investment is not lost. Among the different options for the financial sustainability of the solutions developed by the ISA programme, is the ISA follow-on programme, ISA². On 26 June 2014, the Commission adopted a proposal for ISA², which is currently under negotiation with the Council and the European Parliament. However, this only represents financial stability in the short to medium term. In the longer term, the continued financial sustainability of individual ISA solutions include 'cost recovery', i.e. end-users paying for the costs of operations and service delivery. This is separate to the development of solutions, which would continue to be covered by the ISA programme and its follow-on programme.

The results of the interviews and surveys clearly suggest that the stakeholders believe that the ISA solutions will be financially sustained. 70% of respondents (69) state that the benefits brought by the different ISA solutions would be long lasting regardless of future funding.

This opinion is even more prevalent in the group of interviewed and surveyed EC officials than among Member States' representatives, with agreement rates of 75% (43) and 63% (26) respectively. Only 6% of all EC and Member States' respondents (6) disagree with the sustainability of the benefits; whilst a significant amount of all respondents (23% (23)) does not have a clear opinion. The opinions of the EC officials and Member States' representatives do not vary significantly. It is important to note that, in general, the respondents were also aware that the follow-on ISA² programme will continue to fund ISA solutions in the medium term.

Furthermore, it is widely believed that as long as an individual ISA solution is effective in generating benefits for its direct users, its sustainability should be ensured through concrete

plans for financing its operations and maintenance. Based on their experience, several respondents expressed the view that stakeholders will most likely fund the continuation of successful and 'useful' ISA solutions from other sources of budget if they can.

A prime example of such a situation is the sustainability of the impacts of action 1.10 IMI, action 1.14 SOLVIT and action 2.07 Your Europe for which ISA funding has concluded but which DG GROW sustains as instruments for policy implementation using the budget for Internal Market governance tools, which serve several sectors. The evaluation confirms that the financial sustainability of actions based on a sectorial legal basis (e.g. INSPIRE) can be assured partially by EU programmes, e.g. ISA² or other similar initiatives, in the medium term, but also by the sectors and cost recovery (i.e. billing end-users of ISA solutions¹²³), which is longer term. On the other hand, more horizontal actions can only be ensured by EU programmes and cost recovery since these are not funded by a specific sectorial legal basis.

While it is possible to measure the number of users for common services and generic tools, this is not the case for common frameworks or specific studies run by the programme. Furthermore, the actual benefits delivered by the ISA solutions were not measured, as well as the number of users of each ISA solution, which are not tracked in a systematic way. Therefore, the evaluation recommends that the follow-on programme would focus more on this aspect to ensure better operational sustainability of the actions. It is, however, very positive that the ISA² proposal explicitly refers to "*the development of mechanisms that will measure and quantify the benefits of interoperability solutions*" as an important activity of the new programme. The same issue was acknowledged by the evaluation of the previous programme, i.e. IDABC. It is for this reason that the interim evaluation also suggested a cost-benefit analysis or business case approach for each action. This was only partially taken into account by the programme, through a new study related to the cost-benefit of interoperability.

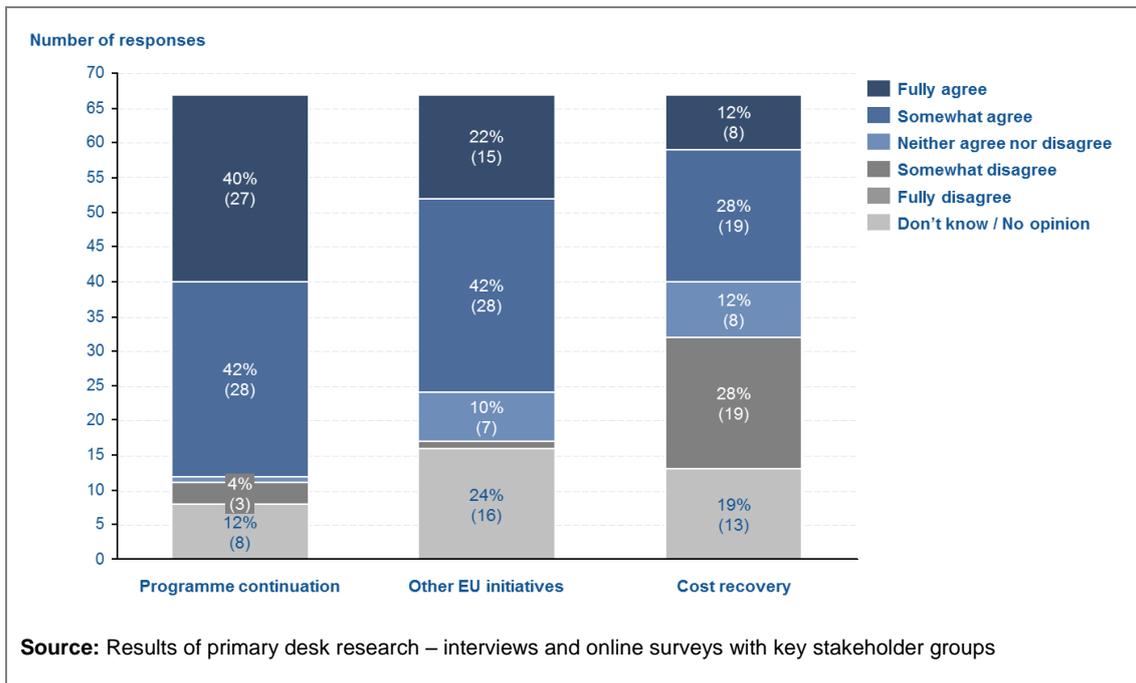
Even though a clear majority of the stakeholders agreed that the benefits of the programme would continue after the financing of the programme concludes; the most desirable measure to ensure the financial sustainability of the ISA solutions, once the programme has concluded, is the continuation of the programme. 82% (55) of respondents fully or somewhat agreed that 'programme continuation' would ensure the sustainability of the solutions, whilst only 4% (3) of respondents somewhat or fully disagreed.

The second most popular measure to ensure the sustainability of the ISA solutions is the support/involvement of the 'other EU initiatives' with 64% of respondents (43) fully or somewhat agreeing and 1.5% (1) somewhat or fully disagreeing. Out of the three proposed measures, the

¹²³ It is important to note that, once established, governance and financing of operational costs for solutions used by multiple DGs is an issue that is not specific to ISA actions. It is rather within the domain of the Commission's IT governance bodies (as all solutions in the programme are EC provided). IT cost sharing is part of a much wider Commission debate yet to be fully addressed.

least favoured measure is ‘cost recovery’ with 40% of the responses (27) fully or somewhat agreeing and 28% (19) fully disagreeing. The opinions remained aligned between the two stakeholder groups, EC officials and Member States’ representatives, and are not, therefore, elaborated separately. It can be concluded that the fact that respondents were aware of the impending ISA² programme made it less likely that they had thought about the longer term need for sustainability of its actions outside the programme.

Figure 29 The extent of agreement on the sustainability benefits of the proposed measures



The aforementioned results are based on the answers of survey respondents only. A similar open-ended question was posed to 31 interviewed respondents as a part of the final evaluation, which revealed the same results in terms of support for the aforementioned options. A total of 17 respondents (55%) considered ‘programme continuation’ as a mechanism to ensure the sustainability of the different ISA solutions, whilst ‘other EU initiatives’ and ‘cost recovery’ were mentioned by 9 (29%) and 7 (23%) respondents respectively. Respondents were asked to also suggest other measures, in addition to the three suggested measures. Overall, the aforementioned suggested measures were mentioned more commonly than any other measures; however, a handful of respondents would also welcome measures that would reaffirm the relevance and cost-effectiveness of the programme’s initiatives in order to ensure the sustainability of the impact of the different ISA solutions.

As mentioned earlier, the sustainability of ISA solutions should only be ensured if these solutions are proving to deliver benefits to European public administrations (end-users). For

those solutions having proven benefits even prior to the adoption of the ISA programme, their operations could be financed through Member States' and/or Commission DGs' funding.

Therefore, even if 'cost recovery' was not considered by the respondents as the main mechanism for ensuring the sustainability of the ISA solutions, the evaluation confirms that for services continued from the previous programmes, like sTESTA, cost-recovery would be the recommended option, in some domains (e.g. operational services), especially taking into account the demonstrated value and extensive use of these services. This highlights the need to focus more on putting sustainability at the core of all actions and educating stakeholders on its importance during the lifetime of the follow-on ISA² programme. The evaluation notes that the budget allocated to sTESTA is equal to 36.7% of the total allocated budget of the ISA programme, which could have potentially limited the financing of new actions.

Further desk research confirmed that the planned measures to financially sustain solutions of the ISA programme, in the medium term, do reflect the aforementioned opinions of key stakeholders, based on the discussions within the ISA Committee meetings. Some of the actions with a need for further funding have already been transferred to the CEF (e.g. STORK, CIPA, MT@EC), whilst others will remain within the new ISA² programme, such as actions related to semantics, EIRA, Base Registries, Catalogue of Services, Sharing and Reuse. Policies that are supported by other financial sources, like IMI, may potentially be provided with additional ISA² programme funding if they can be used as generic tools or if their results can be integrated or reused by other policies. The ISA² programme will continue to support existing actions that contribute to interoperability between public administrations in accordance with their future legal bases, i.e. ECI and GENIS.

3.5.2 Technical and Operational sustainability of the ISA Solutions

The evaluation also looked at programme sustainability, more generally, concentrating on the technical and operational sustainability of the ISA solutions, which requires a substantial governance & management function currently fulfilled by the Commission through the ISA programme governance.

Indeed, as mentioned in Section 1.3, the Commission, through the ISA programme, is currently in charge of the technical developments, operation and maintenance related to the ISA solutions. On the other hand, Member States are in charge of facilitating the adoption of the ISA solutions at national, regional and local levels through the Committee, Coordination Group, and Working Groups established under the ISA programme.

Although the current governance ensures the technical and operational sustainability of the ISA solutions, this is limited to the duration of the programme (2010-2015). This means that the long term sustainability (financial, technical and operational) of the ISA solutions should be ensured by interoperability governance organisations and processes.

Even if ISA programme governance is in place to ensure the technical and operational sustainability, as well as medium term financial sustainability, of the ISA solutions, a global governance on interoperability initiatives at EU level, with responsibility for long term sustainability issues, should have been put in place, as stipulated in the current EIS. However, to establish such governance and ensure the sustainability interoperability initiatives, beyond ISA, political support and willingness are important prerequisites as the current EIS notes.

Furthermore, the evaluation found that the financial sustainability of the programme, in the short to medium term, will be assured by its continuation in ISA². Nevertheless, operational and technical sustainability must also be ensured, and this is more linked to organisational aspects, i.e. interoperability governance. Indeed, in the analysis of the findings of the data collection, there was a lopsided focus on the importance of the financial and technical aspects of sustainability at action level over organisational aspects such as interoperability governance at a programme, Member State or EU level.

This would indicate that stakeholders do not necessarily consider, or have not given much thought to the fact, that the maintenance of the actions of the programme, should be integrated into their business-as-usual operational governance and maintenance processes. If these actions are governed properly within services and processes, this will reinforce the business case to obtain financing from other sources for their operations. The general response was that ISA actions would be sustained if they were useful and that budget could be found for them, whether from the ISA programme budget or that of public administrations. The previous section on Utility, which shows the number of solutions used by Member States (15), Commission services (14) and other EU institutions (5), clearly demonstrate the extent to which the relevant stakeholders identify a need to continue with the technical and operational implementation of

the ISA solutions. For those actions developed within the ISA programme but now funded by other programmes or budget lines, the evaluation is satisfied that they are operationally sustained by the governance structures of those programmes or budget lines, in the medium term.

However, the importance of focusing on the longer term organisational sustainability of ISA actions, exclusively owned and funded by the ISA programme, cannot be underestimated. It is clear that the organisational sustainability in beneficiary administrations, in terms of the governance of a service supported by an ISA action, is very important to avoid the types of situation that regularly occur. For example, where one or a group of individuals manage a programme or action in a knowledgeable, efficient and supportive, but ultimately ad hoc way, without detailing the processes and governance to assure its operational continuity and maintenance once they are no longer involved.

This finding is supported clearly by related examples from the interviews. In one case, the Member State representative admitted that the reorganisation of the internal administration at national level at the time of the launch of the ISA programme resulted in the transfer of officials who were involved in defining the initial priorities of the ISA programme on the Member State's behalf. The interviewee had never been able to locate all of the officials who were involved so the knowledge sits elsewhere and has not been completely transferred. This internal administrative reorganisation affected the Member State's subsequent continuity and involvement in the programme, including its ability to adopt and sustain some actions.

In addition to administrative reorganisation and changes of personnel, changes of government at regional or national level can also affect the organisational sustainability of the ISA programme's actions if there is a refocus on other political priorities. These cases affect all policies and programmes, not just the ISA programme. More formalised structures of the types mentioned above, where actions are embedded with strong governance as part of clear business processes, can mitigate these risks.

3.5.3 Conclusions

The following box summarises the main findings related to EQ8: 'To what extent is the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, ensured?'

Conclusion N°10

Overall, the evaluation concludes that the financial, technical and operational sustainability of the developed solutions, maintained and operated through the ISA programme, is ensured in the medium term.

From a technical and operational standpoint, the annual ISA Work Programme summarises the actions that are funded based on numerous criteria, such as the technical need for an action to deliver a solution and the operational role that it fulfils. As the subsections 3.4.2 and 3.4.3 show, the numbers of solutions used by Member States (15), Commission services (14) and other EU institutions (5) demonstrate the extent to which the relevant stakeholders identify a need to continue with the technical and operational implementation of the ISA solutions.

From a financial standpoint, sustainability of the developed solutions will be guaranteed in the medium term, primarily, by the by the follow-on ISA² programme, although not after that. However, this may change subject to an impact assessment or other policy options, which may be pursued, during the period of the follow-on ISA² programme.

Although the ex-ante evaluation of the ISA² programme found that the follow-on programme is most suitable medium term solution to guarantee the sustainability and continuity of the actions, there is a need to address the long term sustainability of the solutions. In practical terms, the ISA² programme should explore how to financially re-engineer certain services, which it provides, to ensure that users pay for them. In particular, some solutions continued from previous programmes, like sTESTA, could possibly be sustained by a 'cost recovery' process given that it has proven its value and is widely used as providing mature business-as-usual operational services.

In addition, the importance of focusing on the longer term organisational sustainability of ISA actions cannot be underestimated and beneficiaries should formalise governance of services supported by these ISA actions to ensure continuity. Finally, the actual use and benefits of the solutions should be measured by the programme as well as the numbers of users of each ISA solution, which, moreover, are not currently tracked in a systematic way.

3.6 Coherence

The evaluation of the coherence of the ISA programme is driven by the following evaluation questions:

EQ9: 'To what extent did the ISA actions form part of a 'holistic' approach within the framework of the programme?'

EQ10: 'How well were synergies achieved between programme actions and with other EU activities?'

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ9 and EQ10.

In order to answer these questions, the evaluation assesses the overall internal coherence of the ISA programme, i.e. the 'holistic' approach of its different actions within its framework, and also the synergies between the individual ISA actions. The evaluation subsequently analyses the ISA programme's external coherence with other EU policies in several ways. It gauges the extent to which synergies are achieved between ISA actions and other EU initiatives, explores the ISA programme's reuse of results of other EU initiatives before considering the reuse by other EU initiatives of ISA's results.

3.6.1 Holistic approach within the framework of the programme

In order to analyse the extent to which the ISA actions formed part of a 'holistic' approach within the framework of the programme, the evaluation verified the overall strategic approach taken by the programme at its inception as well as its evolution over the period 2010-2015.

As stipulated in the legal decision, the strategic approach taken by the programme is an important aspect: both the EIS and the EIF should be considered by the programme to ensure a holistic approach in the implementation of the actions.

The EIS, as well as the EIF, formed the basis of the ISA programme. During its establishment in 2010, several of the programme's actions were defined and started to implement the EIS. The ISA Work Programme was structured in accordance with the activity clusters and accompanying measures defined in the EIS:

- Cluster 1 – Trusted Information Exchange
- Cluster 2 – Interoperability Architecture
- Cluster 3 – Assessment of ICT Implications of new EU legislation

The evaluation confirms that the ISA programme translated the priorities established in the EIS into actions of the rolling ISA Work Programme in 2010. Even if the majority of respondents who perceived that due consideration was given to the EIS and EIF in this regard, when asked about

the implementation rules of the programme (refer to Section 0 on Efficiency), the evaluation observed that the EIS priorities were not taken into account very much by the programme in the implementation of the actions.

Inherent to the design of the ISA Work Programme, the proposed EIS activity clusters were taken into account; although it is not evident how each individual action made significant progress towards the objectives of each activity cluster defined in the EIS and to the vision set in 2010. It appears also that the delegated responsibilities of the different entities, the ISA Committee, the ISA Coordination Group and three Working Groups, aligned with the EIS clusters, were never clear even to its members.

ISA focused on monitoring the implementation of the EIS through interim and final reviews in 2011, 2012 and 2015 respectively. In 2012, ten major recommendations were made to ensure the continued success of the EIS implementation, including the need to provide a clear definition of the EIS clusters and priorities. Indeed, we can infer from the EIS Implementation review that there was not a clear understanding among Member States and Commission services, as well as a lack of awareness on the EIS, and that the activity clusters defined in the EIS did not constitute the overall strategic approach of the ISA programme in practice.

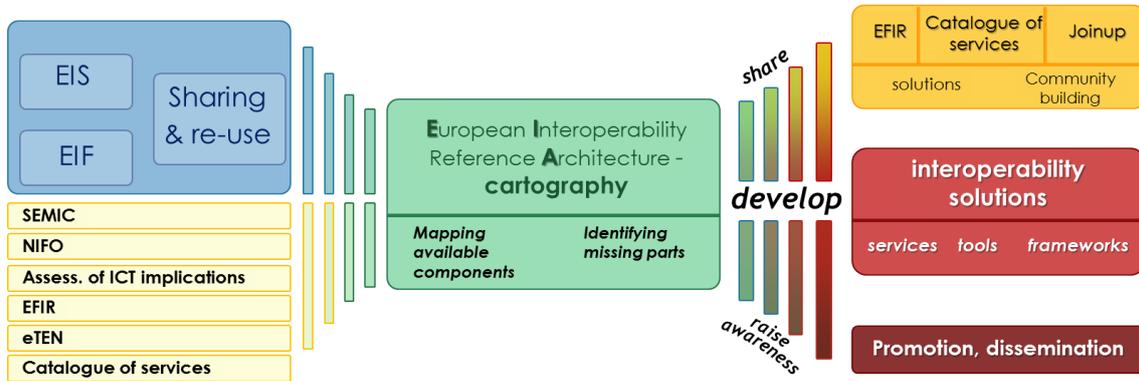
Apart from these issues, the ISA programme encountered difficulties in setting objectives and measuring the objectives of the actions based on the EIS clusters and priorities. This is along the lines of the EIS Implementation review's findings that were unable to measure the progress and results of the EIS clusters and priorities as well.

In 2013, the ISA programme decided to take a different approach and presented a new view of the lines of action of the ISA programme, which differs from what the EIS proposed. During the ISA Coordination Group meeting in January 2013, the Commission presented the mapping of the ISA actions to the various cycles (Inception, Execution, and Operation), the interrelation between the various actions, as well as the global approach of the ISA programme as contributor to interoperability in Europe (Figure 30). EIRA and the EUCart are considered as central instruments to share and develop interoperability solutions to European public administrations, as well as raising awareness, and this was also confirmed during the ISA Committee meeting held one year later in January 2014.

This presentation provided all of the elements to demonstrate a global view on how the objectives of the programme can be met through the execution of the various actions. As the next section on Coordination demonstrates, the Commission invested heavily in engaging with different Member States' and European Commission stakeholders since the interim evaluation in the period 2013 – 2015. It is worth noting that the strategic direction presented at the January 2013 meeting of the ISA Coordination Group and confirmed by the January 2014 meeting of ISA Committee was presented in a number of events that the ISA programme presented in, including an e-Government conference in Athens (September 2014) and meetings with the

responsible Member States' administrations in France (May 2014), Sweden (October 2014) and the Netherlands (November 2014).

Figure 30 ISA Contribution to interoperability in Europe



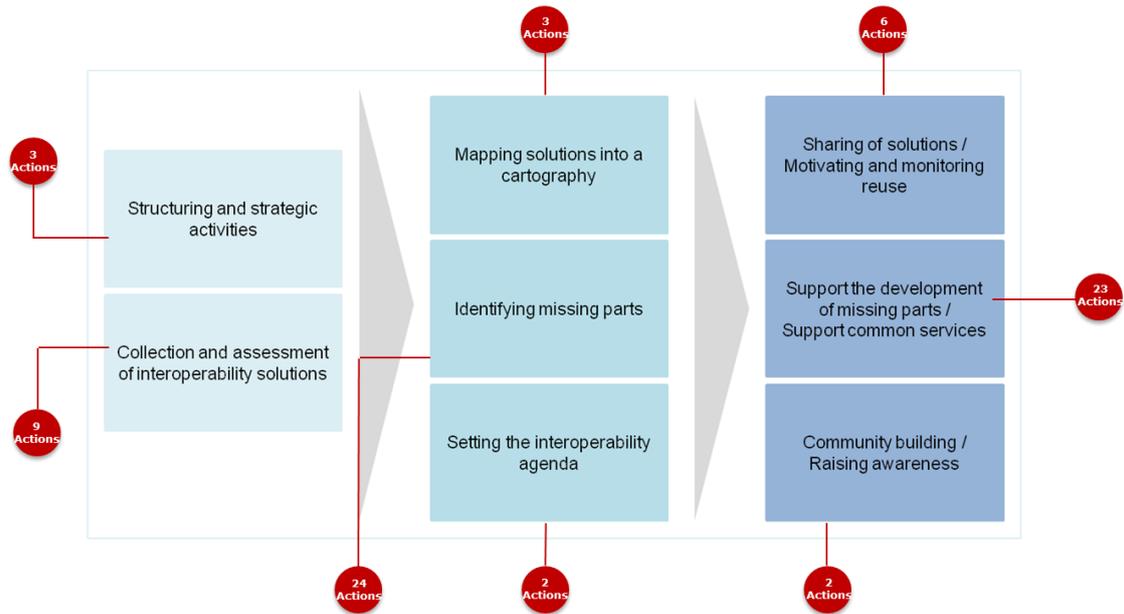
Source: Secondary desk research – Summary record of the ISA Coordination Group meeting presentation (January 2013) and ISA Committee meeting (January 2014)

The ISA Committee appreciated this approach as a positive step towards shaping the “global picture” that is necessary in order to achieve the objectives of the programme¹²⁴.

One year later, the Commission presented an overview on the implementation of ISA’s Work Programme 3rd Revision (2013). This overview provided, once again, the overall approach taken by the programme, which was further refined including a specific link to the ISA actions.

¹²⁴ Summary record of the Meeting of the ISA Committee held on 23 January 2013.

Figure 31 Mapping of the ISA actions to overall approach taken by the programme



Source: Secondary desk research – Summary record of the ISA Coordination Group meeting presentation (January 2013) and ISA Committee meeting (January 2014)

Building on the experience of three years of executing ISA actions, a new grouping of actions was proposed and accepted by DG BUDGET¹²⁵, as well as a set of indicators to measure the achievement of the programme' specific objectives (Figure 35).

The evaluation concludes that since 2013 the strategic direction was in line with the overall approach provided to the ISA Committee in January 2013, even if not in line with the activity clusters proposed by the EIS.

¹²⁵ Programme Statement of ISA Programme delivered by DIGIT to DG BUG in 2014.

3.6.2 Synergies between ISA actions

The subsection above, which shows the strategic approach of the ISA programme, including the mapping of the ISA actions to the various cycles (Inception, Execution, and Operation), the interrelation between the various actions, as well as its global approach as contributor to interoperability in Europe, is useful to demonstrate how synergies can be achieved among its actions. Although the EIS was supposed to be the overall strategic approach on which the ISA programme was based, the evaluation finds that the clusters established in the EIS were too vague for it to base performance indicators on and that the decision to develop its own strategic approach in 2013 was appropriate.

As stipulated in Article 13 (2) of the ISA legal decision¹²⁶, ‘solutions shall be subject to a review every two years’. The assessment of the ISA actions’ dependencies on other ISA actions (or EU initiatives) is one of the main reference domains included in this review¹²⁷.

In addition to this legal obligation, some Member States expressed their interest in having an overview of the links among the ISA actions and between ISA actions and other relevant EU initiatives during the ISA Committee meeting of January 2013. In particular, Denmark mentioned that an overview of the projects and their dependencies would contribute to an efficient risk management and facilitate decision-making for the ISA Committee.

The European Commission addressed this request by initiating this exercise in 2013, under the Monitoring & Evaluation activities of the ISA programme. The first results were then presented in January 2014, during the ISA Committee meeting, which concerned the review of the implementation of the 2013 ISA Work Programme and the forth revision of the ISA Work Programme (2014). The EC’s presentation was welcomed by Member States, including France, which, who commented that it was on the right track in terms of making the link between projects carried out by the various DGs and their value for the public administrations.

Based on a thorough desk research analysis¹²⁸ of the main links among the actions of ISA programme¹²⁹, it appears that each has an average of five direct links with other ISA actions:

¹²⁶ Decision N° 922/2009/EC of the European Parliament and of the Council of 16 September 2009 on interoperability solutions for European public administrations (ISA), 3.10.2009, Official journal [L260/20].

¹²⁷ The ISA solutions review will include the three following reference domains: firstly, the assessment of the actions’ contribution to the EIS, the extent to which the ISA actions take into account the underlying principles of the EIF stipulated in Art. (4): “technological neutrality and adaptability; openness; reusability; privacy and protection of personal data; and security” and are aligned with EU priorities; secondly, the assessment of the actions’ strategic alignment with the ISA programme objective and, thirdly, the links among ISA actions and between ISA actions and other EU interoperability initiatives.

¹²⁸ The following sources were used for this analysis: ISA Work programme 5th revision 2015; and D02. Updated version of the report on the links between ISA actions and ISA actions and other EU interoperability-related initiatives performed by KURT SALMON under SC8 Monitoring and Evaluation activities, Framework Contract n° DI-06693-00 (May 2014).

¹²⁹ By default, the ISA action 5.01 Monitoring & Evaluation has links with all the other actions; it was not considered in the scope of the analysis. The analysis has focused on the other 50 ISA actions of the programme.

- No link has been identified for one action (2%): ISA action 2.10 'Multisectorial crisis and business continuity services'. The EUR 400,000 budget allocated to this action was fully executed by May 2012, after the completion of a feasibility study with Points of Contact of identified building blocks.
- 24 actions (48%) possess between one and five links with other ISA actions;
- 25 actions (50%) enjoy more than five links with other ISA actions; including six ISA actions (12%) that are linked to more than ten other ISA actions. With links to 20 other ISA actions, the ISA action 1.01 'Promoting Semantic Interoperability amongst the European Union Member States' is the best example to illustrate the efforts made by the EC to form a holistic approach within the ISA programme.

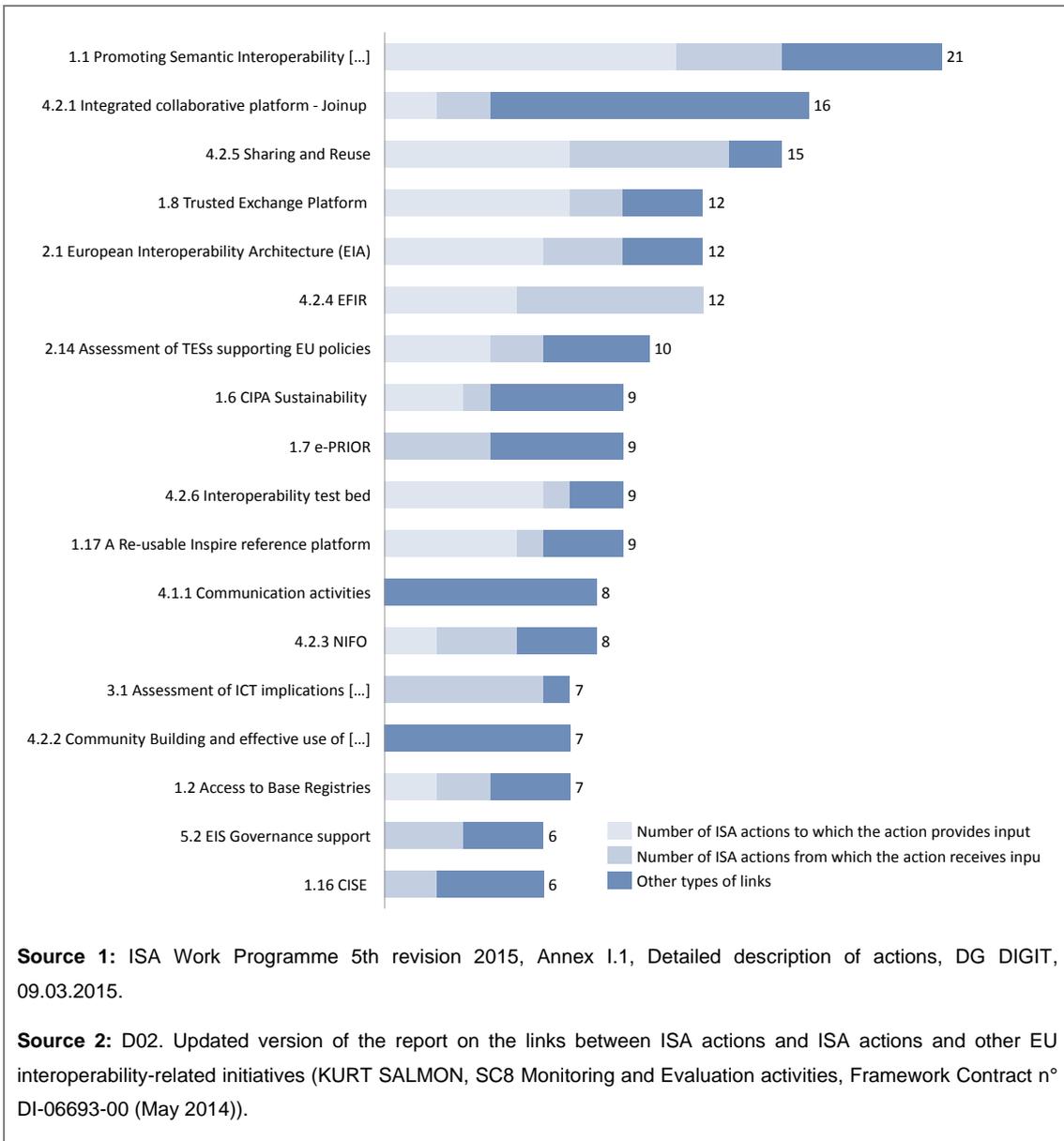
These numbers should be considered as the most pessimistic scenario as they can only be higher because some links may indeed not have been identified in the analysis. Funding of some actions had concluded at the time of writing this report and, consequentially, there are no longer operational contact points for these actions.

When one delves deeper into the ISA actions' types of activities, three frameworks stand out from the others for their level of reuse: Seven ISA actions have largely reused the 'Sharing and reuse strategy'; six considered the action 2.01 European Interoperability Architecture and the output from six actions aim to be tested by the action 4.2.06 Interoperability test bed platform.

With regard to common services, it is important to highlight that the ISA action 1.01 Promoting Semantic Interoperability amongst the European Union Member States provides input into 11 actions; the reusable generic tool that is the most used by other actions is the action 2.08 Trusted Exchange Platform.

Among the other actions, another example that illustrates the coordination of the actions within the ISA programme is action 4.2.01 Joinup, which supports 12 other actions in their effort to build communities and promote (re-usable) solutions. The key results of the analysis on the main links among the ISA actions is summarised in the figure below.

Figure 32 Summary of the links among ISA actions¹³⁰

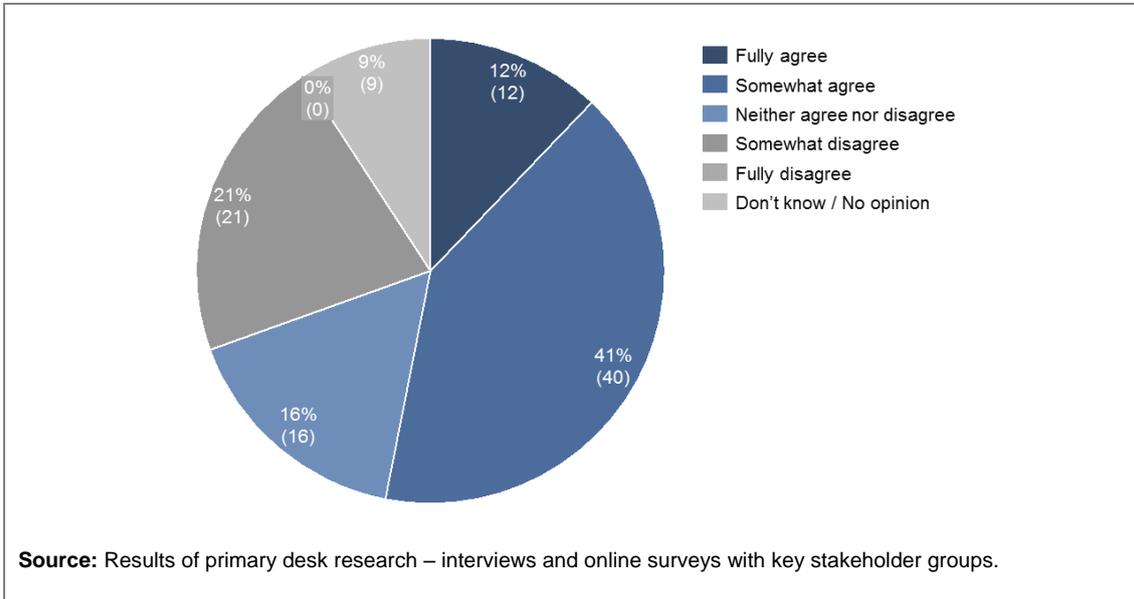


The field research from the interviews and online surveys broadly acknowledged the existence of synergies that the desk research proved, although this was not as explicit as the latter given the varying levels of knowledge among stakeholders on the subject. With regard to the overall numbers of Member States’ representatives and EC officials who answered the question on the extent to which synergies were well established among the ISA actions, 12% (12) fully agreed

¹³⁰ The bar chart represents only the actions having more than 5 links.

and 41% (40) somewhat agreed. 22% (21) somewhat disagreed, 16% (16) neither agreed nor disagreed and 9% (9) did not express an opinion.

Figure 33 Synergies between ISA actions

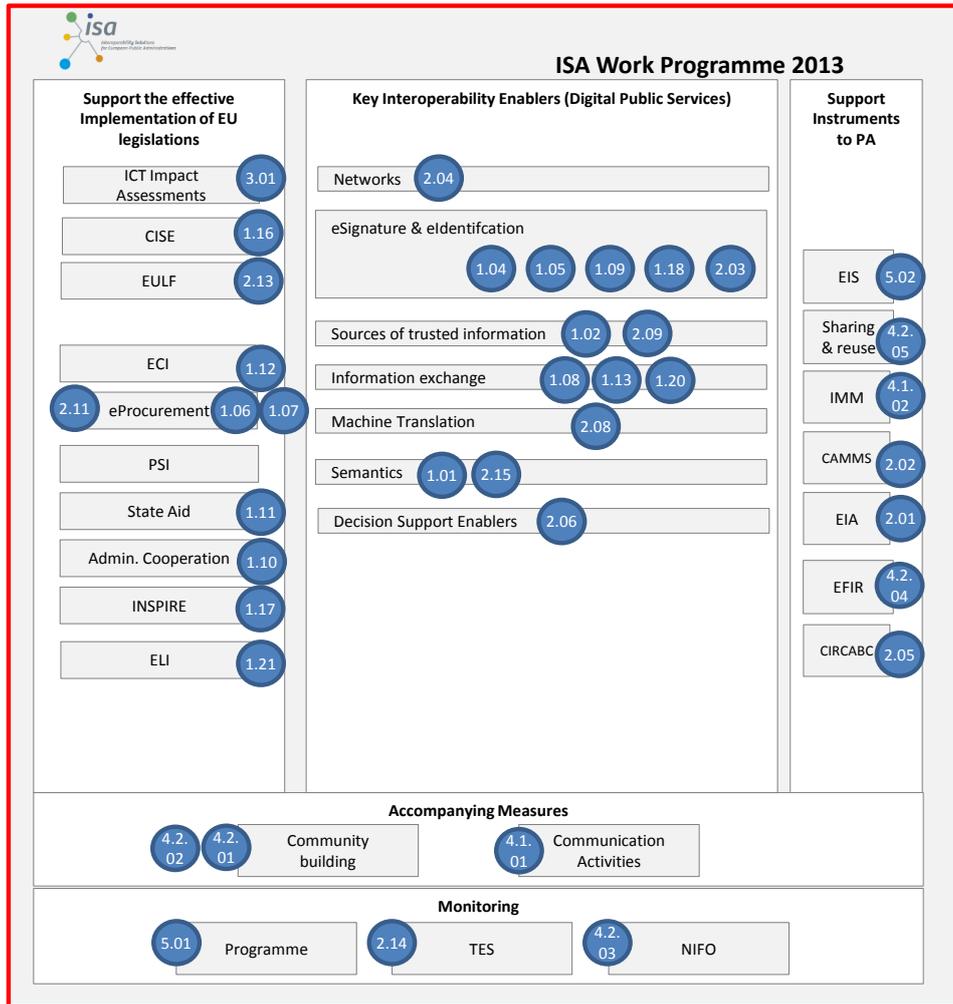


During the interviews, five EC officials provided additional comments relating to how well synergies were established among the ISA actions. One official, who fully agreed, noted that ‘a lot of work has been done to improve the synergies between the ISA actions’. Although two other officials fully agreed for the actions that they were involved in, each commented that it was difficult to have the overview of this given the large number of actions in the ISA programme. Two other officials, while acknowledging that synergies did exist, suggested that more roadshows on specific actions by ISA Project Officers would provide the opportunity to identify where further synergies could be realised.

While it is clear that synergies do exist between certain ISA actions, a striking feature of the evaluation was the strength of the identity of individual actions and interviewees’ and survey respondents’ familiarity with them, rather than with the programme as a whole. It appears as though many respondents, who are deeply involved in one or more action, often have limited knowledge of other actions. Given that all actions need to fulfil the objective to ‘facilitate efficient and effective electronic cross-border and cross-sectoral interaction’ between European public administrations, it can be concluded that there is an opportunity to explore more synergies between individual actions.

Furthermore, the interrelation between the various actions (Figure 34), as well as the global approach of the ISA programme as contributor to interoperability in Europe, as presented in subsection 3.6.1, in which every action is aware of the cluster it belongs to and addresses the

Figure 35 Clusters of the ISA Programme



Source: Programme Statement of ISA Programme, DG DIGIT to DG BUG, 2014.

This grouping of actions into clusters of activities as well as the overall approach to execute the programme shows the end-to-end cumulative value of each cluster and its constituent ISA actions in a compelling and holistic way. This is coherent with the ISA² proposal¹³², which stipulates the 'lines of action' of the new programme as specified in the Value Chain.

- Cluster 1 – Support for the effective implementation of EU legislation;
This includes interoperability activities in support of the implementation of EU legislation such as the IMI Regulation and the INSPIRE Directive.
- Cluster 2 – Key Interoperability Enablers;

¹³² COM (2014) 367 Decision of the European Parliament and of the Council establishing a programme on interoperability solutions for European public administrations, businesses and citizens (ISA²), Brussels, 26.6.2014.

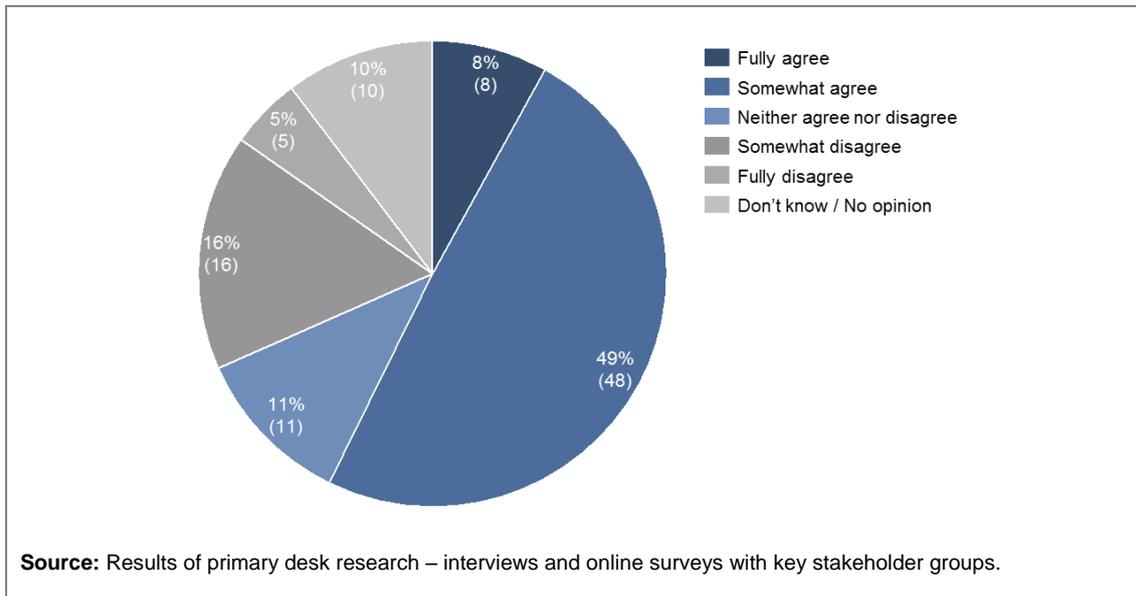
This includes interoperability actions in support of electronic identification, electronic signature and base registries.

- Cluster 3 – Support instruments for public administrations;
The ISA programme created several instruments to facilitate interoperability between public administrations, e.g. EIRA, CAMMS, ICT Assessment method.
- Cluster 4 – Accompanying measures; and
- Cluster 5 – Monitoring activities.

3.6.3 Synergies between ISA and other EU initiatives

Overall, the majority of Member States’ representatives and EC officials were in broad agreement on the extent to which synergies were well established among the ISA actions and other EU initiatives. 8% (8) fully agreed and 49% (48) somewhat agreed. 5% (5) fully disagreed and 16% (16) somewhat disagreed. 12% (11) neither agreed nor disagreed and 10% (10) did not express an opinion.

Figure 36 Synergies between ISA and other EU initiatives



EC officials provided comments on this during the interviews. One official noted the challenge of getting different EU institutions to work together to achieve synergies. Another official commented that a lack of awareness by different EU initiatives of each other hindered the realisation of synergies and another noted that synergies were easier to achieve among more policy focused DGs. Finally, one official commented that it was important to highlight the complementarity among different initiatives to ensure that realistic synergies can be achieved by distinct policies because it is more difficult in practice than in theory.

Overall, about 43% (39) of Member States' representatives and EC officials did not have an opinion or did not provide examples of synergies between the ISA programme and other EU initiatives. A further 11% (10) took the opportunity to state their view that not enough synergies were being achieved. Some of the feedback on this point follows below:

- A general lack of horizontal governance, and streamlining, (coherence) of ICT programmes at EU level and a need for stronger coordination and better prioritisation within the ISA programme itself;
- More synergies with programmes run by DG CNECT;
- Outputs of the ISA programme needed to be promoted to establish where synergies could occur; and
- The ISA programme could adopt, develop and promote projects and solutions from other initiatives.

These comments aside, it is normal that cross-cutting policy issues, such as interoperability and e-Government, draw the attention and have the involvement of different stakeholders, such as different DGs and other EU institutions. In any public organisation, such as the EC, different departments and stakeholders continuously provide different inputs and expertise on policy areas to contribute to the evolution of public policy in those areas. This is all the more prevalent and necessary with regard to such innovative subjects as these that profoundly affect so many distinct aspects of public administration. As confirmed by the external study mandated by the European Parliament in 2013 on Ubiquitous Developments of the Digital Single Market¹³³, coordination on scope and timelines could be improved in this matter. In this regard, the next section of this report, 3.7 Coordination, clearly demonstrates the extent to which different DGs have subsequently achieved concrete results in internal coordination since the interim evaluation by working together coherently in this regard. The recently announced merger of the inter-service Group on Institutional Capacity and Administrative Reform and the informal Friends of Public Service Modernisation group into one new entity, the Inter-service Group on Public Administration Quality and Innovation, is the latest example of the progress that is being made. ISA's participation in the Digital Single Market (DSM) coordination sub-groups is a further example.

As part of the different contributions to the evolution of public policy in this area, for example, the evaluation observed that the ISA programme published the eGovernment factsheets in June 2015¹³⁴; the main objective of which is to provide a comprehensive overview of the eGovernment activities in the EU. On the other hand, DG CNECT publishes the eGovernment

¹³³ Study on Ubiquitous Developments of the Digital Single Market, Directorate General for Internal Policies, Policy Department A: Scientific and Economic Policy, European Parliament, October 2013.

¹³⁴ European Commission, 'Just published: eGov factsheet on the EU', DG DIGIT, Brussels, May 2015.

benchmark report¹³⁵ annually. The scope of latest report, published in 2015, is limited to eGovernment services offered online for seven life events¹³⁶. As part of its results, there is a specific section on key enablers such as electronic identification and authentic sources. However, looking at the latest report, the evaluation did not find any specific reference to the ISA programme or some of its results even if interoperability is an important element of the eGovernment benchmark report. On the contrary, the eGovernment factsheets published by the programme make a clear reference to the eGovernment benchmark report.

Nevertheless, several respondents provided a number of areas where synergies were achieved between the ISA programme and other EU initiatives. With 13% (12) of respondents mentioning it or related programmes, CEF was the clear leader with which the ISA programme has achieved synergies. INSPIRE was the second most popular choice of 8% (7) of overall respondents and the Digital Single Market/Digital Agenda for Europe was the third choice at 7% (6). Other suggestions included: e-Government at 5% (5); e-ID at 4% (4); Open Data/PSI at 4% (4); e-Procurement at 3% (3) and Modernisation of European public administrations 3% (3).

Indeed, in order to avoid fragmentation and ensure a holistic approach across interoperability initiatives at EU level, the EIS and EIF were considered by the ISA programme, but to a lesser extent by other EU initiatives. The current EIS states that its adoption should 'constitute the overall strategic approach on which the ISA programme — and possibly other EU initiatives — will base its Work Programme for the coming years'¹³⁷. Hence, this confirms that the focus of the strategy was primarily relying on the ISA programme, as the main implementation instrument for and contributor to the establishment of an appropriate governance structure. However, the evaluation finds that the clusters established in the EIS were too vague for the ISA programme to base performance indicators on and that the decision to revise the EIS, thus, is appropriate.

When asked about the overall added value achieved by these synergies between the ISA programme and other EU initiatives, Member States' representatives and EC officials provided a range of answers that the evaluation team grouped for analysis purposes. Although 32% (28) did not know or provide an answer and only 2% (2) of respondents saying that there were no synergies, it would indicate that the remaining 66% (57) of respondents who provided answers can see value in the ISA programme's coherence with other initiatives and for its direct and indirect users.

¹³⁵ European Commission, 'EU eGovernment Report 2015 shows that online public services in Europe are smart but could be smarter', DG DIGIT, Brussels, 23.06.2015.

¹³⁶ A study prepared for the European Commission DG Communications Networks, Content and Technology: Future-proofing eGovernment for a Digital Single Market, FINAL INSIGHT REPORT: June 2015.

¹³⁷ COM (2010) 744 - Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions 'Towards interoperability for European public services', Brussels, 16.12.2010.

18% (16) of respondents said that the overall added value achieved by these synergies was efficiency of resources invested and results achieved. 11% (10) each said that these synergies were coherence or coordination with other initiatives, the promotion of interoperability and reusability. 8% (7) highlighted that the ISA programme complements other EU and national initiatives. 2% (2) said that it aligns well with other EU initiatives and a further 2% (2) said that it achieves sustainability for its and other initiatives' solutions.

Over 82% (40) of EC officials provided an answer on the main synergies achieved between the ISA programme and EU initiatives led by DGs they worked in. The most commonly cited synergy, by 14% (7) of surveyed respondents, was work related to semantic interoperability (e.g. core vocabularies and catalogues). Reuse of solutions was cited by 12% (6) of respondents and work done on standardisation (e.g. CAMSS action 2.02) was mentioned by 10% (5). Awareness and work related to e-Procurement/e-Invoicing (action 1.07 e-Prior) were each cited by 8% (4) of respondents. Of the Member States' representatives and EC officials who were asked whether there were any synergies with other EU or national initiatives that should be more explored by the ISA programme, 22% (13) said yes without providing other suggestions. In addition, 14% (8) of respondents suggested that further synergies with CEF and its constituent components should be explored. 12% (7) of respondents suggested an 'overarching structure' governing all of the EC's ICT initiatives and 8% (5) said standardisation. Open Data & PSI, INSPIRE and coordination with national initiatives were mentioned by 5% (3) of respondents. It is evident from the findings of the data analysis that the ISA² programme should focus on how it can best achieve additional synergies to those achieved by its predecessor. However, it is important to note that this approach is inherent to what the EU has been doing since the IDA programme as launched in 1995.

3.6.4 *Reuse by ISA of results delivered by other EU initiatives*

While there were high levels of agreement among EC officials about the reuse by ISA of results delivered by EU initiatives (58% (27) fully or somewhat in agreement) or of ones led by their DGs (43%, (22) fully or somewhat in agreement), it was subsequently surprising to note that 78% (45) of them overall did not know of or did not name EU initiatives whose results the ISA programme reused and 77% (30) of these EC officials did not know of or did not name an initiative led by their DG whose results the ISA programme reused. The evaluation notes that low levels of awareness of major aspects of the ISA programme among 'internal' stakeholders is a source of concern given that these EC officials were all invited to participate in the final evaluation because of their perceived general familiarity with interoperability issues at EU level.

Given that it is not sufficient to rely solely on the varying levels of knowledge of interviewees and online survey respondents when discussing a topic such as reuse by ISA of results delivered by other EU initiatives, the evaluation team complemented the aforementioned findings with desk research. This analysis showed that the ISA programme has reused and contributed to the work of INSPIRE, eIDAS and the PSI Directive, all of which are fundamental to achieve interoperability. The work of these programmes is fully aligned with the objectives of the ISA programme; it is logical, therefore, that ISA benefits from and contributes to enhancing them. In addition, the work currently being undertaken by action 2.01 European Interoperability Architecture (EIA), action 2.14 Trans-European Systems (TES), regarding the EU Cartography, and action 4.2.5 Sharing and reuse strategy will allow for the identification of what other interoperability tools, solutions and results can be used by other EU initiatives.

3.6.5 *Reuse by other EU initiatives of ISA's results*

Apart from 29% (15) of EC officials who did not know of or did not name initiatives led by their DGs that reused results obtained by the ISA programme, another 29% (15) of all respondents mentioned one or several of their DGs' initiatives that did. These initiatives included eGovernment action Plan 2011/15, CEF, Automatic translation, Open data portal, projects for roadside inspection, D-CAT, information systems, e-Justice, Market data exchange and Electronic Exchange of Social Security Information (EESSI). The most common individual action that was mentioned as re-used by 8% (4) of respondents' DGs was action 1.07 e-Prior. Action 1.17 Reusable Inspire Reference Platform (ARE3NA) and action 2.05 CIRCABC were each re-used by 6% (3) of respondents' DGs.

75% (38) of EC officials did not know of or did not name other EU initiatives that reuse results obtained by the ISA programme. 12% (6) of respondents cited CEF. Action 1.07 e-Prior, action 2.05 CIRCABC, action 2.06 EU Survey, and action 2.08 MT@EC were each cited by 4% (2) of respondents as actions with results that are re-used by other initiatives. E-Health and e-Justice were each cited by 2% (1) of respondents. 2% (1) of respondents each suggested that results

from action 1.01 Semantic interoperability, action 1.17 Reusable Inspire Reference Platform (ARE3NA), action 1.22 Big data and open knowledge for public administrations and action 2.04 Data Communication Network Service (sTESTA) were reused by other EU initiatives. The high numbers of EC respondents who did not know of or did not name an EU initiative that reuses results obtained by the ISA programme reinforces the concern previously identified by the evaluation about respondents' level of awareness of major aspects of the ISA programme.

It is important here, however, to triangulate the levels of perception on which EU initiatives reuse results obtained by the ISA programme with the findings of the desk research on where these results are reused, which is provided in the section 3.4 and confirms that European Commission DGs and services use 15 ISA solutions out of approximately 23 available. In addition, although the desk research did not provide a breakdown of which stakeholders, EC officials or other, reused ISA's results, it did indicate an impressive level of reuse of ISA's results, nonetheless, if downloads are used as a proxy. With regard to action 1.01 Semantic Interoperability, the number of times stakeholders accessed core vocabularies on Joinup during the period January 2014 – January 2015¹³⁸, inclusive, was consistently three times higher than its target of 500 hits a month, except for two occasions when it was still impressively either over twice (December 2014) or just under three times (June 2014) its target. Both months when it was less than three times its target could be due to the fact that both are holiday periods. A second indicator, the number of downloads of core vocabularies from Joinup, provides further evidence of behaviour that would indicate the existence of synergies between the ISA programme and EU initiatives. For the same period, January 2014 – January 2015¹³⁹, inclusive, the number of downloads of core vocabularies on Joinup was between two and over four times its target of 120 depending on the month of the year with one exception. Almost twice the target of 120 in December 2014, core vocabularies were downloaded from Joinup 234 times that month. This figure, which is low only relative to the range analysed, can logically be explained by the holiday period, which started in the second half of that month. With regard to action 2.02 CAMSS, the number of visits on the community site on Joinup exceeded its target in the second quarter of 2015; indicating that synergies are most likely being derived from its reuse. However, the number of Member States or organisations that have published CAMSS assessments in the second quarter of 2015 (3), was lower than the target of five, indicating room for improvement in this respect.

¹³⁸ Number of access to Core Vocabularies on Joinup as available on the ISA Dashboard portal.

¹³⁹ Number of downloads of Core Vocabularies on Joinup as available on the ISA Dashboard portal.

3.6.6 Conclusions

The following box summarises the main findings answering to EQ9: ‘To what extent did the ISA actions form part of a ‘holistic’ approach within the framework of the programme?’ and EQ10: ‘How well were synergies achieved between programme actions and with other EU activities?’

Conclusion N°11

The evaluation confirms that the EIS has been taken into account as part of the design of the ISA Work Programme 2010, but to a much less extent in its implementation. Even if ISA was supposed to be the main instrument to implement the EIS, the strategic (holistic) approach taken by the programme was different. In this regard, the strategic approach of the ISA programme, created in January 2013, including the mapping of the ISA actions to the various cycles (Inception, Execution, and Operation), the interrelation between the various actions, as well as its global approach as contributor to interoperability in Europe, demonstrates that a holistic approach within the framework the ISA programme does exist, even if the programme does not convey this sufficiently. Furthermore, the programme’s strategic approach considers EIRA and the EUCart as central instruments to share and develop interoperability solutions for European public administrations, as well as raising awareness.

The analysis shows that the ISA programme houses independent actions, with which stakeholders are often more familiar than the programme itself. In the context of the low levels of awareness, there is a need to provide greater clarity on the holistic approach and the documented process about the selection of proposals for new actions. Nevertheless, all ongoing actions have at least one link, and often more, with other actions within the programme.

Conclusion N°12

Although a considerable amount of synergies exist between programme actions and with other EU activities, and that synergies were achieved between programme actions quite well and with other EU activities fairly well, the evaluation concludes that further synergies could have been achieved.

25 actions (Half of all actions) have more than five links with other ISA actions; including six ISA actions that are linked to more than ten other ISA actions. 24 have between one and five links with other actions. Given the ISA programme's holistic approach, it is normal that some actions have more synergies with other actions, which does not reduce the value of the latter actions:

- CEF
- INSPIRE
- Digital Single Market/Digital Agenda for Europe
- e-Government
- e-Identification
- Open Data/PSI
- e-Procurement
- Modernisation of European public administrations

Although the evaluation notes that there were several studies mandated by different Commission DGs in the area of interoperability and eGovernment services, it concludes that it is normal and understandable that cross-cutting policy issues draw the attention and have the involvement of different stakeholders to continuously provide different inputs and expertise to contribute to the evolution of public policy in those areas. This is all the more prevalent and necessary with regard to innovative subjects, such as these, that revolutionise so many distinct aspects of public administration and the lives of the citizens they serve. Furthermore, the evaluation notes with satisfaction the ongoing efforts of the ISA programme and DG DIGIT to work with these relevant DGs to increase the EC's coherence on these topics, through enhanced coordination, notably, in the Inter-service Group on Public Administration Quality and Innovation and also in its publications, such as the NIFO and eGovernment factsheets.

On a less satisfying note, the analysis showed that levels of awareness about synergies were lacking among interviewees and survey respondents. Almost half of the Member States' representatives and EC officials did not have an opinion or did not provide examples of synergies between the ISA programme and other EU initiatives. In addition, three-quarters of EC officials did not know of or did not name an EU initiative whose results the ISA programme reused, an initiative led by their DG whose results the ISA programme reused, or EU initiatives that reuse results obtained by the ISA programme.

3.7 Coordination

The evaluation of the coordination of the ISA programme is driven by the following evaluation questions:

EQ11: 'To what extent did coordination of activities between Member States, including the ISA Committee, exist to ensure stakeholders' engagement in the ISA programme?'

EQ12: 'To which extent were activities coordinated or aligned with the needs of other stakeholders with whom the Commission was supposed to interact in the framework of ISA?'

The remainder of this section is divided into different subsections in accordance with the different judgement criteria allowing the evaluation to answer EQ11 and EQ12.

The evaluation assesses several indicators to determine how well the ISA programme engages with its different stakeholder groups, i.e. Member States' representatives, EC officials or other ISA stakeholders, and to what extent, to realise its objectives. This also includes assessing the interaction and events with different stakeholders, either participated in or organised by the ISA programme. It also investigates how the programme coordinates with Member States to deliver its activities. As well as measuring how much the ISA programme uses results achieved by Member States in its solutions, the evaluation analyses the public consultations that it conducted to ensure broad and comprehensive involvement of its relevant stakeholders groups.

3.7.1 Internal coordination within the European Commission

The issue of coordination and linkages with other EU programmes is common across other similar EU initiatives such as the ICT PSP. Its final evaluation¹⁴⁰ considered as not sufficiently strong the links of the ICT PSP with other EU programmes. The improvement of information flow and linkages were raised as a recommendation in the CIP ICT PSP interim and final evaluations. This is along the lines of the interim evaluation that recommended the Commission IT Governance to ensure that external synergies between ISA actions and other EU initiatives are identified and documented upfront through its existing coordination mechanisms¹⁴¹.

The evaluation notes that, since the interim evaluation, significant improvements have taken place in high-level coordination between DGs with a focus on building institutional capacity, which the ISA programme has both contributed to and benefited from regarding interoperability. The ISA programme, through DG DIGIT, has participated in the inter-service Group on

¹⁴⁰ Gragam Vickery, Terttu Luukkonen, Slavo Radosevic, Robbest Fisher, CIP ICT PSP Final (Second Interim) Evaluation, 2011

¹⁴¹ Refer to recommendation 6 of the interim evaluation of the ISA Programme.

Institutional Capacity and Administrative Reform, which also involves and collaborates with the following DGs:

- Communications Networks, Content and Technology (CNECT)
- Economic and Financial Affairs (ECFIN)
- Employment, Social Affairs and Inclusion (EMPL)
- Internal Market, Industry, Entrepreneurship and SMEs (GROW)
- Human Resources and Security (HR)
- Justice and Consumers (JUST)
- Migration and Home Affairs (HOME)
- Regional and Urban Policy (REGIO)
- Research and Innovation (RTD)
- Health and Food Safety (SANTE)
- Taxation and Customs Union (TAXUD).

In 2014, this ISG produced the 'EU Quality of Public Administration Toolbox', involving all of the aforementioned list of DGs, which aims to strengthen public administrations to create prosperous, fair and resilient societies, by collating existing EU policies and international standards that can improve the quality of public administration. This toolbox can support public administrations in the context of the EC's Annual Growth Survey that launches each European Semester of economic policy coordination between the European Commission and Member States, and the resulting country-specific recommendations (CSRs) for administrations. It is a reference and resource, not a prescription, to inform public administrations of relevant and interesting practices to best act on or address their CSRs.

The work of the ISG is relevant for the thematic objectives of the European Structural and Investment Funds (ESIF), which encourage and enable Member States to strengthen governance under the thematic objective 11: *"enhancing institutional capacity of public authorities and stakeholders and efficient public administration"* and ICT, e-government and interoperability under thematic objective 2 *"enhancing access to, and use and quality of, information and communication technologies"*. In this regard, the ISA programme's involvement in this group, through DG DIGIT, is fully appropriate. It benefits its stakeholders and adheres to its objective *"to facilitate the efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations enabling the delivery of electronic public services supporting the implementation of Community policies and activities"*. It is worth noting that other EU programmes, relevant to the ISA programme, such as the Connecting Europe Facility and Horizon 2020, also have a major role to play to contribute to the achievements of these two important thematic objectives.

Additionally, the ISA unit played a leading role in the informal 'Friends of Public Service Modernisation' group. Launched and chaired by DIGIT, it also involves DG CNECT and DG

RTD and meets at Director level¹⁴². In June 2015, agreement was reached to streamline both this group and the ISG into one expanded 'Inter-service Group on Public Administration Quality and Innovation' with a mission "to pave the way for a modern, innovative public sector, which is open, transparent and more accountable, as a means to meet the EC goals of growth, competitiveness and jobs". This expanded ISG will have an annual work-plan, including all activities that it undertakes, which will be communicated to the Secretariat General.

As regards the ISA unit, it participates in the Digital Single Market (DSM) coordination sub-groups, chaired by the Secretariat General, such as 'Interoperability and Standards', 'eGovernment' and 'Free flow of data. The ISA unit has also participated actively in the Digital Agenda for Europe Coordination (DAE) inter-service group.

The evaluation concludes, therefore, that the ISA programme is coordinating well internally at a broader Commission-wide level to ensure that its objectives are incorporated into other relevant and related EU policies.

¹⁴² The ISA unit organised a Task Force with Member States for them to help shape the mandate of the 'Friends of Public Service Modernisation' group (April 2014) demonstrating its reflex to engage and coordinate with core stakeholders.

3.7.2 *Interaction between stakeholders and with the European Commission*

In line with the recommendations of the IDABC final evaluation, in 2011 the programme established a communication strategy ('ISA Communication Strategy') targeting various stakeholders. The main purposes of this strategy were to intensify and improve interaction between stakeholders and with the European Commission, compared to the previous programme, and involve stakeholders in the activities of the ISA programme. This was supposed to be achieved by making use of appropriate communication and consultation mechanisms such as organisation of meetings, workshops, conferences and public consultations. To allow for broad-based community building, the programme also made use of online platforms, e.g. Joinup and the ISA website, to provide for interaction with and between ISA stakeholders.

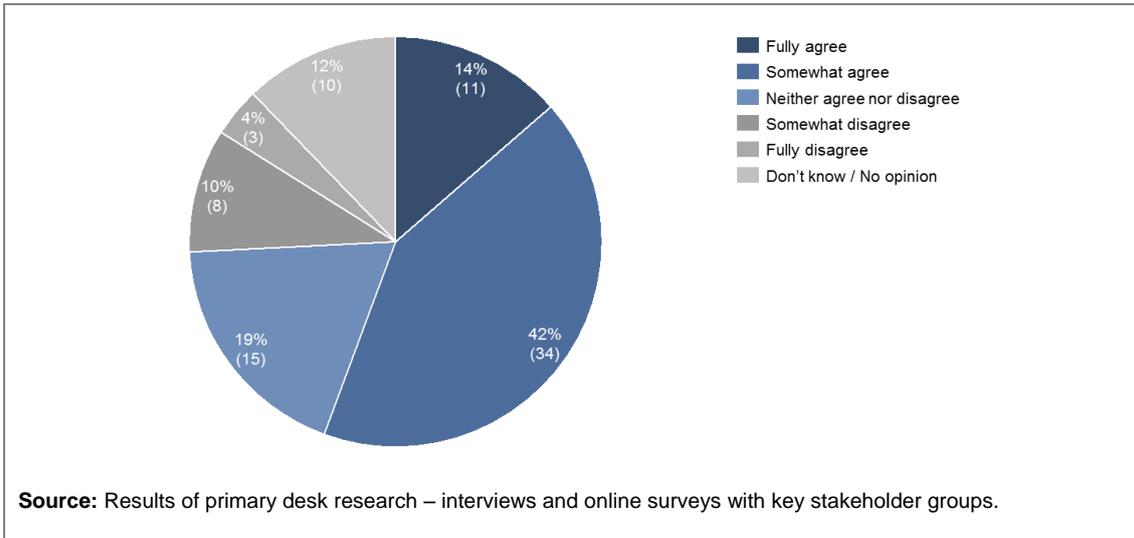
The ISA Communication Strategy defined the following high-level objective in 2011 '*Encourage stakeholders to take interoperability, re-use and share into consideration starting from the planning stage of any e-Government action, by building comprehensive interactive multi-level communication channels to move stakeholders from awareness of interoperability, reuse and share to action.*'

In order to evaluate the extent of the ISA programme's success in this regard, the evaluation team conducted extensive analysis of the levels of coordination and interaction between it and its core stakeholders, Member States' representatives and EC officials as well as other ISA stakeholders.

3.7.2.1 *Extent to which the ISA programme raised awareness of the ISA solutions*

With regard to the overall numbers of Member States' representatives and EC officials who responded in interviews and online surveys, 14% (11) fully agreed and 42% (34) somewhat agreed that the ISA programme raised awareness of the ISA solutions among national public administrations. 4% (3) fully disagreed and 10% (8) somewhat disagreed. 18% (15) neither agreed nor disagreed and 12% (10) did not express an opinion.

Figure 37 Respondent's agreement levels on the awareness raising of the ISA programme



Member States' representatives offered a number of insights into this question. There was a need to focus on communicating intelligibly and in more dynamic way about the solutions and their reusability. However, there was also acknowledgement of how the ISA programme had raised awareness of its solutions among national public administrations and the challenge that this task entails. Finally, Member States' representatives frequently recognised the constraints and responsibilities that existed at a national level with regard to raising awareness of the ISA solutions. This level of self-awareness by Member States' representatives is important and appropriate.

EC officials were surveyed about the extent to which the ISA programme raised awareness of the ISA solutions among the Commission DG and services. 20% (8) fully agreed and 44% (18) somewhat agreed that the ISA programme achieved this but 3% (1) fully disagreed and 13% (5) somewhat disagreed. 15% (6) neither agreed nor disagreed and 5% (2) did not express an opinion.

The evaluation team noted the comments of two officials who both somewhat disagreed with this question; albeit from different points of view. The first, an official from outside DG DIGIT, was 'aware of the ISA programme out of personal interest' but was not aware of 'global communication' between ISA and his DG. The second official, from within DG DIGIT, stated that the programme tries its best to communicate but 'often other DGs and services are simply not that interested'.

All survey recipients except those who were DG DIGIT officials were asked about the visibility of ISA activities to their DG, country or organisation. Overall, 16% (15) fully agreed and 26% (24) somewhat agreed that ISA activities were sufficiently visible to their respective entities. 10% (9)

fully disagreed and 26% (24) somewhat disagreed. 20% (20) neither agreed nor disagreed and 2% (2) did not express an opinion.

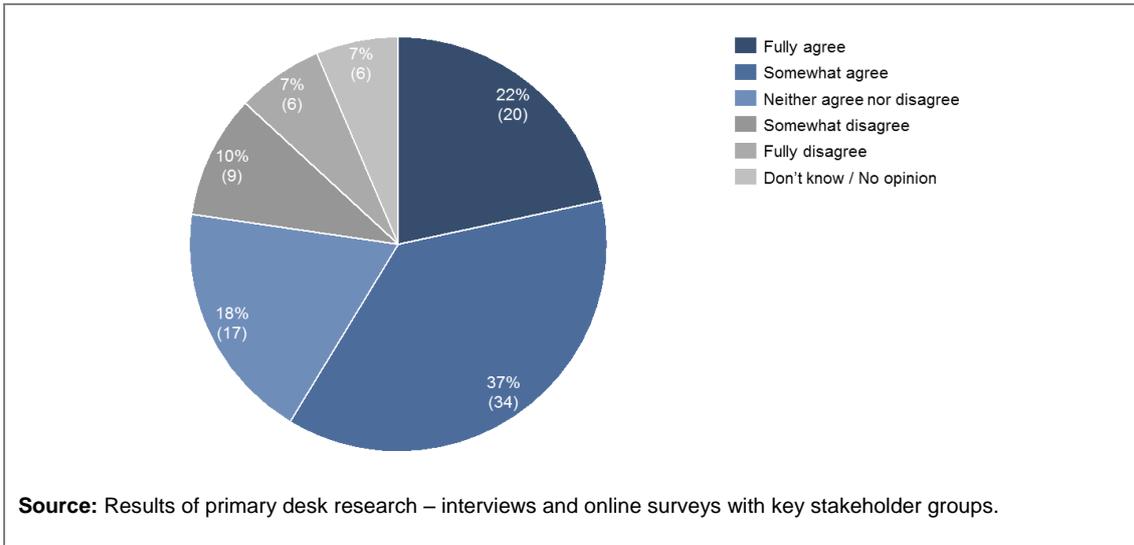
With almost a third of all Member States' representatives & EC officials neither agreeing nor disagreeing or not expressing an opinion on the extent to which the ISA programme raised awareness of the ISA solutions among national public administrations and 20% EC officials responding similarly on the same topic among Commission DG and services, it can be concluded that the ISA programme could do more to raise overall awareness of its solutions through enhanced interaction and coordination with its stakeholders. This view is strengthened by the high numbers who disagreed (36%) and neither agreed nor disagreed or did not expressed an opinion (22%) when asked whether the visibility of ISA activities to their DG, country or organisation was sufficient. However, it is important to reiterate that the respondents' own low level of awareness of major aspects of the ISA programme is a concern given that they were all invited to participate in the final evaluation because of their perceived general familiarity with interoperability issues at both EU and national levels.

Nevertheless, the desk research showed that the ISA programme increased its presence at conferences and other events run by the EC, having been involved in over 60 events since its inception; the very events that allow for participants' awareness to be raised. Approximately three-quarters of these events (45) have taken place since the interim evaluation, as detailed in the Annex, which is a strong indication of the focus of the ISA programme to increase interaction with its stakeholders.

3.7.2.2 Extent to which interaction between ISA and its stakeholders was effective

The evaluation also assessed the extent to which interaction between ISA and its stakeholders was effective for a consistent exchange of information, views and best practices. With regard to the overall numbers for Member States' representatives and EC officials who responded, 22% (20) fully agreed and 37% (34) somewhat agreed that interaction between ISA and their countries or DGs was effective enough to ensure a consistent exchange of information, views and best practices. 6% (6) fully disagreed and 10% (9) somewhat disagreed. 19% (17) neither agreed nor disagreed and 6% (6) did not express an opinion. Within these figures, 27% (14) and 25% (13) respectively of EC officials fully and somewhat agreed with this statement whereas the same figures were 15% (6) and 51% (21) for Member States' representatives.

Figure 38 Respondents' agreement levels on the interaction of their country and ISA



Member States play an important role in driving the strategic orientations of the programme, which itself should be considered as a forum for better alignment between national and European priorities on interoperability. The evaluation highlights that this strategic alignment was not fully achieved in the previous programme considering that cross-border interoperability was not viewed as a high priority in several Member States. To ensure this alignment, interaction between national, regional and local European public administrations are needed. This is out of the control of the ISA programme that, in any case, provides online platforms for discussions between stakeholders.

With regard to the overall numbers for both Member States' representatives and other ISA stakeholders who answered on whether the interaction between their countries or organisations was effective enough to ensure that the implementation of the Work Programme was in line with their needs, 18% (9) fully agreed and 25% (13) somewhat agreed. 6% (3) fully disagreed and 22% (11) somewhat disagreed. 25% (13) neither agreed nor disagreed and another 4% (2) did not express an opinion.

3.7.2.3 Adequacy of ISA's electronic platforms to deliver consistent interaction between stakeholders

As mentioned above, the use of online platform is instrumental for broad-based community building. The following online platforms were established in the course of the ISA programme:

- Joinup¹⁴³: Launched in 2011, Joinup is a collaborative platform that offers several services, which aim to help e-Government professionals share their experience with each other and to find, choose, re-use, develop and implement interoperability solutions. It involves eGovernment and interoperability professionals from all over Europe but is open to those from outside the EU. It offers relevant content and insight into various areas such as access to a repository of reusable interoperability solutions; legal information on usage and development of open-source software within public administrations and interoperability impact of EU regulations and actions among others.
- ISA Website¹⁴⁴: Launched in 2011, the ISA website is the landing page providing access to a wealth of information about the ISA programme, including ISA solutions, news, events, policy, official documentation and a repository of information to download.
- ISA Dashboard¹⁴⁵ Established in 2014, although previously hosted in an external domain (isamonitoring.com), it provides key stakeholders of the ISA programme with the ability to track the progress of each ISA action over time. The dashboard was developed to inform ISA stakeholders of each action's activities and achievements. The efficiency and effectiveness of each ISA action has been monitored since 2011 or since their existence thereafter.

A question related to the adequacy of ISA's electronic platforms to deliver consistent interaction between stakeholders and with the European Commission was posed all 110 interviewees and survey recipients. Overall, 21% (23) fully agreed and 43% (47) somewhat agreed that the electronic platforms (i.e. Joinup, the ISA website and dashboard) used by ISA to deliver consistent interaction between stakeholders and with the European Commission were adequate. 2% (2) fully disagreed and 7% (8) somewhat disagreed. 17% (19) neither agreed nor disagreed and 10% (11) did not express an opinion.

Several EC officials, who somewhat agreed with this statement, provided comments during the interviews on this point. One official opined that communication could be improved through the grouping of solutions because the provision of isolated information on individual solutions alone 'does not really help'. It is important to communicate and promote ISA's electronic platforms as means to help users in different European public administrations. Another official, who also somewhat agreed, said that the platforms had a certain degree of complexity, which it was necessary to simplify, and also stressed the importance of engaging officials from local administrations. Other comments included users' experiences of limited functionalities,

¹⁴³ Integrated Collaborative Platform Joinup.

¹⁴⁴ ISA.

¹⁴⁵ ISA dashboard.

incompatibility with specific software and certain pages not working or accessible. One official believed that the Joinup platform was underused, which he attributed to a lack of awareness or user-friendliness.

Aside from these minor comments mentioned above, this large level of agreement on the adequacy of ISA's electronic platforms is supported by the desk research¹⁴⁶.

In addition, the ISA website statistics for the three years between June 2012 and June 2015 also demonstrate the success of the programme in raising its awareness among its stakeholders and interested parties¹⁴⁷. Nothing signifies this more than the compound annual growth rate of 57% in unique visitors between the end of May 2013 and the same time in 2015. In real terms, the numbers of unique visitors in the year to the end of May 2015 was two and a half times what it was in the year to the end of May 2013.

Table 22 ISA website statistics for the three years between June 2012 and June 2015

Timeframe	June 2012 May 2013	– June 2013 May 2014	– June 2014 – May 2015	CAGR ¹⁴⁸
Number of total visits	37447	64332	108222	70%
Number of unique visitors	30569	39088	75215	57%
Number of pages views	78847	105974	246495	77%

It is likely that the recent development on ISA solutions landing page¹⁴⁹ has contributed to this impressive growth of traffic on the ISA website page. This page lists approximately 19 tools, services and frameworks in the area of e-Government that have been produced by the ISA programme, the latest of which, the Re3gistry tool, has already received favourable feedback for its interoperability with other instruments from colleagues in DG COMP and DG DIGIT. The ISA solutions landing page also contains facts and figures on their users. The solutions developed under ISA were also the basis for some 20 new publications. Most publications are in the format of leaflets that concisely describe the solution, its benefits, target groups and successful implementations, pointing to the ISA website for further, more detailed information. The publications were disseminated at over 30 events and on the ISA website¹⁵⁰.

¹⁴⁶ Integrated Collaborative Platform – Joinup on the ISA Dashboard.

¹⁴⁷ DG DIGIT confirmed on 16 July 2015 that the ISA website was launched in mid-2011 and it does not have any data available for the period prior to May 2012.

¹⁴⁸ CAGR: Compound Annual Growth Rate: the average year-on-year growth rate over the number of years in range.

¹⁴⁹ Our ISA solutions for you.

¹⁵⁰ Publications available on the ISA website.

In addition, the ISA programme regularly sends e-news on ISA related topics to specific ISA target groups, most of which are published on its website. E-news Articles are sent to up to 2000 different stakeholders. However, the ISA programme filters topics by relevance to different target audiences within this number as appropriate. In addition, Twitter is used as a complementary communication channel. Both the then responsible Vice-President Sefčovič and the Director-General tweeted ISA news of core importance on their respective Twitter accounts.

It is clear from these findings and the desk research that a considerable amount of interaction between the ISA programme and its stakeholders occurs through formal communications, networks, tools and work on different solutions. It is also clear that this has grown over the duration of the programme indicating its growing success and achievements. However, the findings from the data analysis demonstrate that the potential exists for the ISA² programme to continue the ISA programme's trend to do more in this regard and exploit this better.

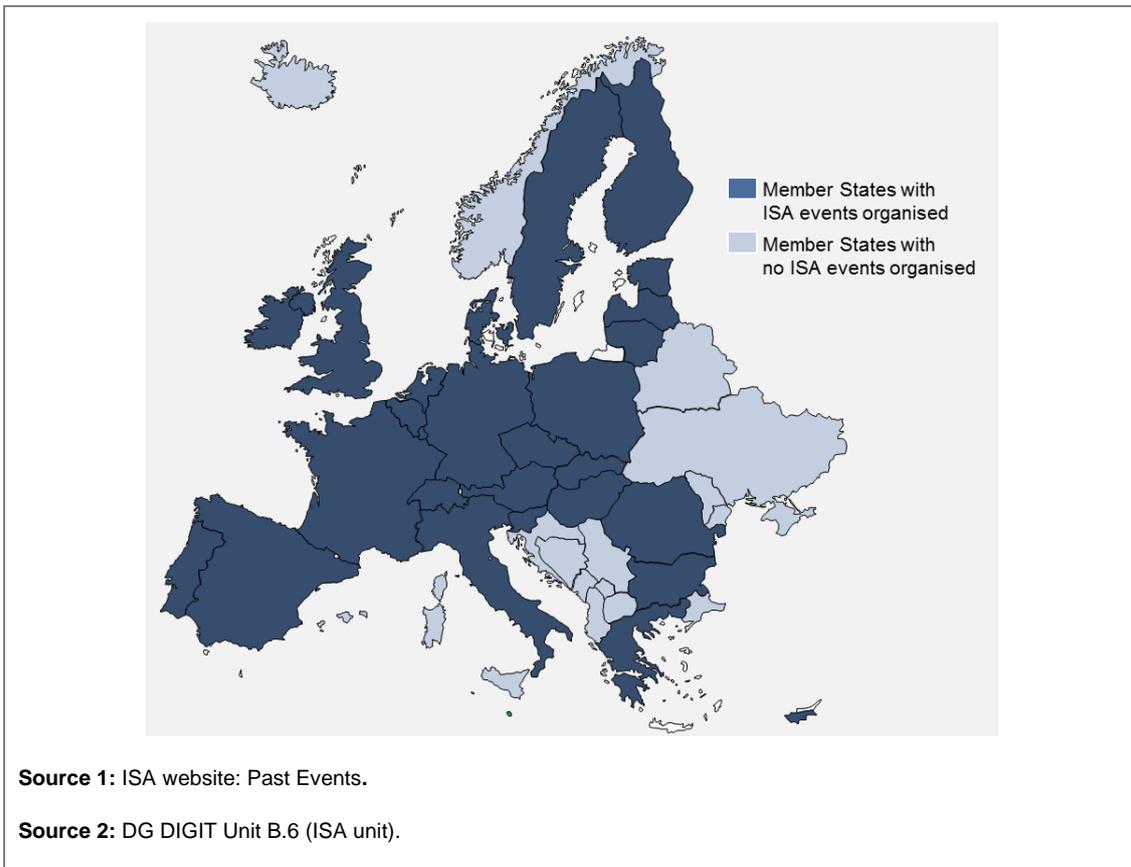
3.7.3 Events organised between ISA and Member States

3.7.3.1 Events organised by ISA with the participation of Member States

The ISA programme organised 24 workshops, 7 conferences and 2 other meetings with the participation of Member States' representatives between 2010 and 2015¹⁵¹. Five of the seven conferences (SEMIC Conferences 2011, 2012, 2013, 2014 and 2015), and two workshops (CESAR workshops) were specific to action 1.01 Promoting semantic interoperability amongst the European Union Member States.

¹⁵¹ At the date of the report, the last event taken into consideration in the analysis is the meeting of 26 June 2015.

Figure 39 Member States with/without ISA event occurrence



The numbers attending the two CESAR workshops almost tripled from 16 to 45 between 2012 and 2013, with an increase in the number of countries represented from 13 to 18. The average number of participants at the SEMIC Conference over each of its five editions was 139. 29 countries, on average, were represented every year, with greater numbers of participants, an average of 177, in 2014 and 2015. The corresponding Annex provides an overview of the breakdown of the participants for these events.

3.7.3.2 Workshops with Member States’ representatives

A total of five tailor-made workshops involving representatives of eight Member States were held during the period of the ISA programme, all of which occurred since the interim evaluation. In addition to specific workshops with different public officials from the Netherlands and Sweden, the ISA programme developed a new flexible workshop concept that would allow Member States to learn more about all of the solutions that best meet their needs and interests. This concept has the aim of promoting the ISA solutions that are ready to be used by Member States. Under this model, Member States can choose the solutions or topics to be presented, the format of the event (e.g. presentations from the Commission or bilateral presentations, workshop or discussion style), the identification and invitation of their preferred target groups

(administrators, IT specialists, policy makers, management or executive level, officials or contractors), the duration and the location of the meeting. In 2014, the first series of these individual workshops with France, Netherlands, Sweden and Greece were held. In addition, a common workshop for Poland, Romania, Estonia and Luxembourg was held in Brussels. As many as 12 Project Officers participated in any single workshop and gave presentations of solutions developed under their lead.

The feedback surveys conducted among participants of these workshops showed high levels of satisfaction rates with the tailor made format (on average, some 80% of participants deemed the workshop content to be relevant for their work and some 90% indicated that they might re-use some of the solutions presented (40% 'definitely', '50% maybe'). France and the Netherlands reported on their positive experience in the ISA Committee and recommended other Member States to request such workshops. Following this, other Member States indicated their interest to do so in 2015. Denmark has confirmed and Bulgaria and Italy have expressed an interest.

Approximately 66% (22) of the 24 workshops, 7 conferences and 2 other meetings, which the ISA programme organised and held between 2010 and 2015, were held since 2013, indicating a greater level of participation of Member States in the programme as it continued and the effort of the ISA programme to ensure this. The average number of representatives of Member States participating in the annual SEMIC Conference in the years after the interim evaluation was 85, which is 52% higher than the average number, 55, that attended in 2011 and 2012. The number of workshops that occurred in the period between January 2013 and June 2015 was over twice the number held in the period assessed by the interim evaluation. This increase in the number of events would suggest a greater demand by, and confirm a higher level of participation of, representatives of Member States in events organised by the ISA programme. Further details of the participation of the Member States in events organised the ISA programme since 2010 can be found in the Annex.

With regard to the overall numbers for Member States' representatives and EC officials who responded, 34% (33) fully agreed and 33% (32) somewhat agreed that the management and execution of ISA programme events were satisfactory. Only 1% (1) fully disagreed and another 1% (1) somewhat disagreed. 11% (11) neither agree nor disagreed and 20% (20) did not express an opinion.

The evaluation team noted the comments of some officials who had different views on this question. One official, who fully agreed that the management and execution of ISA programme events were satisfactory, was in favour of having a calendar of relevant events organised by ISA unit or by national high level administrations. Another official, who somewhat agreed, said that ISA should be even more selective on the types of events it runs as the objective should be 'more on spreading the word', citing a suggestion of organising an event for immigration

agencies wishing to exchange information. Another official, who also somewhat agreed, opined that ISA needed to 'go beyond the comfort zone to reach potential [new] users.'

3.7.3.3 Events organised by Member States with the participation of ISA

The ISA programme participated in 40 events organised by Member States between 2010 and 2015. Approximately 20% of these events were run in the context of Member States' presidencies of the Council of the European Union. These events took place specifically in 20 Member States. 20% of the events were in Spain and 15% each in Greece, in the Czech Republic and in Poland; the others were distributed among 16 other Member States. With approximately two-thirds of these events taking place since the interim evaluation, it is clear that the ISA programme has increased its level of engagement with its core stakeholders in Member States to communicate and raise awareness of what it is doing. Further details on the Member States where the ISA programme participated in these events can be found in the Annex of this report.

3.7.4 Events organised between ISA and other stakeholders (e.g. private sector, standardisation organisations)

3.7.4.1 Events organised by ISA with the participation of other stakeholders

The ISA programme organised 23 events that involved other stakeholders between 2010 and 2015. Nine of these consisted of the five SEMIC conferences, the two CESAR workshops and the conferences on action 1.12 OSS platform for ECI and action 2.08 Machine Translation Service by the European Commission. A BOMOS (Governance, Maintenance and Development Model for Open Standards) workshop in 2015 involved consultants, industry groups, academics, standardisation bodies. A SEMIC conference 2015 workshop on data models was held involving the EC and external expert consultants.

Given that approximately 66% (22), of the 24 workshops, 7 conferences and 2 other meetings that the ISA programme organised and held between 2010 and 2015 were held since 2013, this clearly indicates a greater level of participation of other stakeholders in the programme as it went on. Other stakeholders (non EC officials or Member States' representatives) accounted for approximately 41% (an average number of 57 a year) of participants on average in the annual SEMIC Conferences. The details of the participation of other stakeholders in events organised the ISA programme can be found in the Annex.

Other ISA stakeholders generally thought that the management and execution of ISA events were satisfactory; 33% (4) fully agreed and 33% (4) somewhat agreed. 17% (2) neither agreed nor disagreed and a further 17% (2) had no opinion. Several of these respondents offered opinions on how ISA events could be enhanced. One respondent, who somewhat agreed, felt that there was a 'need to widen the audience and increase the participation of different stakeholders'. Another, who also somewhat agreed, felt as though it should involve non-technical stakeholders also; 'Nowadays technical interoperability is not a problem compared to legal and organisational interoperability'.

3.7.4.2 Events organised by other stakeholders with the participation of ISA

The ISA programme participated in 57 events organised by other stakeholders, such as standardisation organisations, industry and academic groups between 2010 and 2015. 87% (51) of the external events took place within the European Union, more specifically across 19 Member States, whereas 13% (6) were held outside of the European Union, specifically in South America, Japan, Moldova, Switzerland, the US and the UAE. With over 63% (36) of these events taking place since the interim evaluation, it is clear that the ISA programme has increased its level of engagement with external stakeholders to communicate and raise awareness of what it is doing. Further details about where the ISA programme participated in events organised by other stakeholders since 2010 can be found in the Annex.

3.7.5 *Coordination between Member States and the ISA unit on the ISA activities*

As detailed in section 1.3, DIGIT is assisted by the ISA Committee which is expected to meet once, at the very utmost twice, per year to deliver opinions on the draft implementing act, i.e. the draft ISA Work Programme and to discuss issues at policy level. Moreover, Member States are also represented in the ISA Coordination Group which meets 3-4 times per year. In addition to these programme management meetings, regular meetings are also held in the context of the four ISA Working Groups.

11 ISA Committee meetings occurred between 2010 and 2015¹⁵². Corresponding Annex shows the number of Member States, EEA and accession countries represented in each of these meetings. On average, 23 Member States were represented in the ISA Committee meetings¹⁵³. Whereas 11 Member States attended all the ISA Committee meetings and three others attended more than 90% of these meetings, it has to be noted that one, namely Ireland, seems to have abandoned its participation in these meetings. In fact, this Member State did not attend any of the last three ISA Committee meetings.

15 ISA Coordination Group meetings occurred between 2010 and 2015¹⁵⁴. Corresponding Annex shows the number of Member States, EEA and accession countries represented in each of these meetings. On average, 18 Member States were represented in the ISA Coordination Group meetings¹⁵⁵. Whereas two Member States attended all the meetings and five others attended more than 90% of these meetings, France and Hungary, seem to have abandoned their participation in these meetings. In fact, these two Member States did not attend any of the last four ISA Coordination Group meetings.

The final evaluation assessed the extent to which the management and execution of the ISA Committee, ISA Coordination Group and the ISA Working Group meetings were satisfactory. The majority of those Member States' representatives who participated fully (39%, 16) and somewhat (32%, 13) agreed that the management and execution of the ISA Committee meetings were satisfactory. 5% (2) neither agreed nor disagreed and 24% (10) did not express an opinion. Member States' representatives fully (39%, 16) and somewhat (34%, 14) agreed that the management and execution of the ISA Coordination Group meetings were satisfactory. 10% (4) neither agreed nor disagreed and 17% (7) did not express an opinion. Of those Member States' representatives who participated, 32% (13) fully and 32% (13) somewhat agreed that the management and execution of the ISA Working Group meetings were

¹⁵² At the date of the report, the last ISA Committee meeting taken into consideration in the analysis is the one of 25 June 2015.

¹⁵³ Norway and Iceland (EEA countries) attended, as observers, 7 Committee meetings, whereas Croatia attended twice before acceding to the EU, and 3 times afterwards.

¹⁵⁴ At the date of the report, the last ISA Coordination Group meeting taken into consideration in the analysis is the one of 02 June 2015.

¹⁵⁵ EEA countries attended 22% of the ISA Coordination Group meetings and Croatia attended once before acceding to the EU and 3 times afterwards.

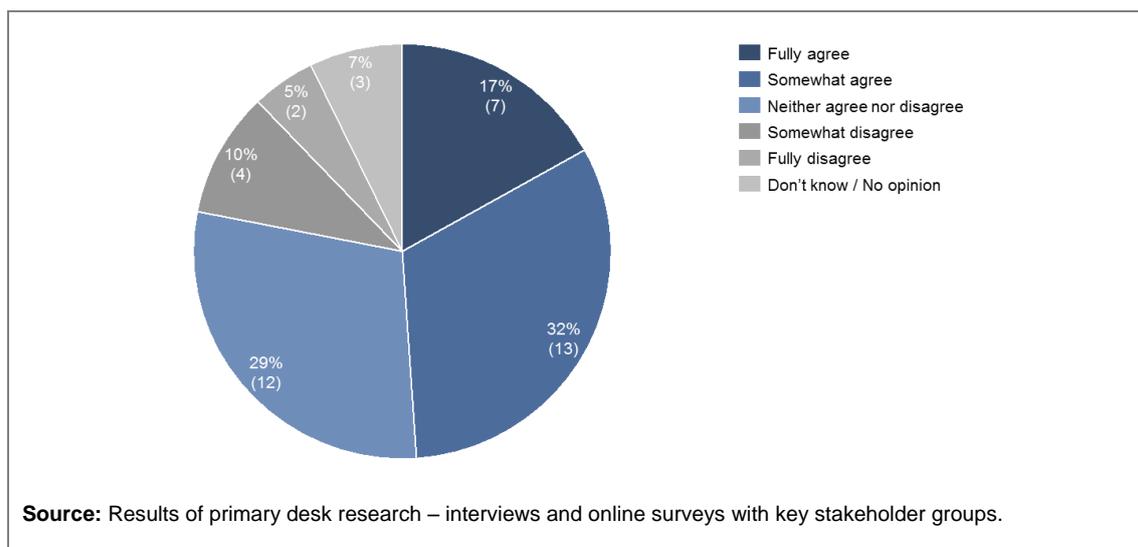
satisfactory. 4% (2) somewhat disagreed, 10% (4) neither agreed nor disagreed and 22% (9) did not express an opinion. On the management and execution of programme meetings, one official opined that ‘the events are perfectly organised, but the crowd could be expanded’ to include the relevant experts and decision makers.

3.7.6 Coordination of ISA Coordination Group with ISA Working Groups

As mentioned by the recommendations from the interim evaluation of the ISA programme, members of the specialised Working Groups established by the ISA Committee should report nationally to the ISA Coordination Group members to ensure that ISA solutions are aligned with needs and initiatives at national level.

Therefore, the evaluation verified the extent to which the ISA Coordination Group coordinates with the ISA Working Groups to ensure that the ISA results are communicated at national level. Of those Member States’ representatives who participated, 17% (7) fully agreed and 32% (13) somewhat agreed that the ISA Coordination Group coordinated with the ISA Working Groups to ensure that the ISA results were communicated at national level. 5% (2) fully disagreed and 10% (4) somewhat disagreed. 29% (12) neither agreed nor disagreed and 7% (3) did not express an opinion. The combined rather elevated percentage (36%) of those who neither agreed nor disagreed or did not express an opinion on this point would indicate that Member States’ representatives could be more active in communicating on the ISA programme and its results both with each other and again at national level.

Figure 40 Respondents’ agreement levels on the ISA Coordination Group coordination with the ISA Working Groups in communication of the ISA results at national level

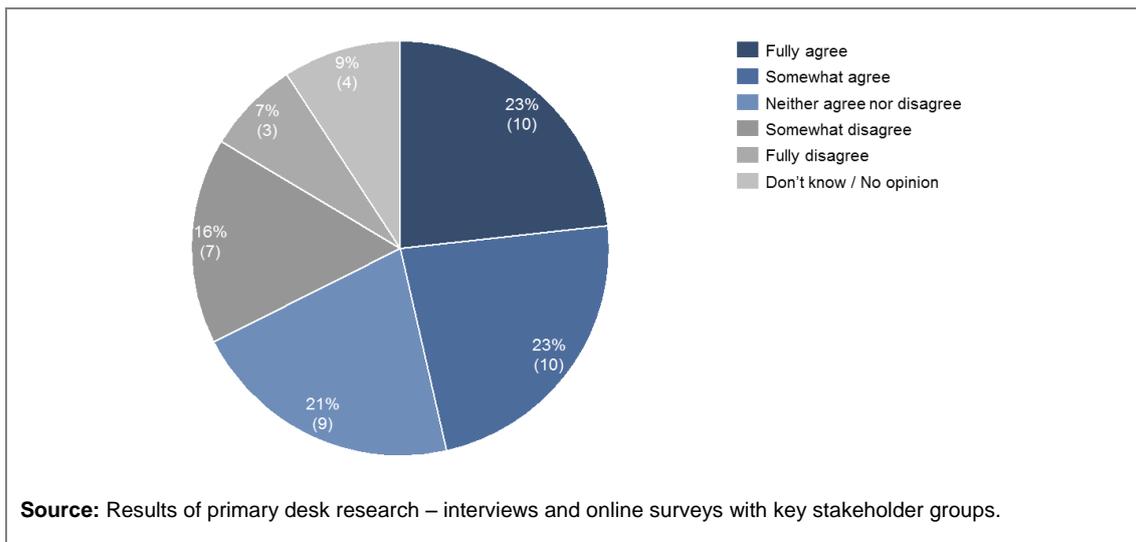


3.7.7 Involvement of different stakeholders in the ISA programme

Another important metric to measure with regard to coordination is ISA’s effectiveness in engaging relevant stakeholders in the programme. Member States’ representatives did not express high levels of agreement on the extent to which ISA was effective in engaging stakeholders from their country, 5% (2) fully agreed and 24% (10) somewhat agreed. 37% (15) somewhat disagreed and 20% (8) neither agreed nor disagreed. 7% (3) each fully disagreed or did not express an opinion.

More EC officials (outside DIGIT) felt that ISA was effective in engaging stakeholders from their DGs than did not. 46% (20) fully or somewhat agreed, with this group splitting evenly between both options. 7% (3) fully disagreed and another 17% (7) somewhat disagreed. 21% (9) neither agreed nor disagreed and 9% (4) did not express an opinion. Regarding other ISA stakeholders, 33% (4) fully agreed and 8% (1) somewhat agreed that ISA effective was in engaging their organisation’s stakeholders. 8% (1) fully disagreed and another 17% (2) somewhat disagreed. 17% (2) neither agreed nor disagreed and another 17% (2) did not express an opinion. Two other ISA stakeholders recalled that the ISA programme had a focus on facilitating efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations. This demonstrates that ISA engaged stakeholders outside of the context of European public administrations, when appropriate, during the course of its activities. When engaged, it is clear that these stakeholders’ experiences were positive and took account of the efforts made by ISA in doing so.

Figure 41 Extent of agreement on ISA’s effectiveness in engaging relevant stakeholders



3.7.8 *Consideration of results achieved by Member States in the establishment of ISA solutions*

With regard to the overall numbers for Member States' representatives and all EC officials who participated in the online survey and interviews, 4% (4) fully agreed and 35% (34) somewhat agreed that results achieved at national level were reused by the ISA programme. 4% (4) fully disagreed and 11% (11) somewhat disagreed. 11% (11) neither agreed nor disagreed and 35% (34) did not express an opinion.

However, about 37% (15) of Member States' representatives offered a number of initiatives from their countries that the ISA programme reused. This included input related to system and semantic catalogues (action 1.01), base registers (action 1.02), European Legislation Identifier (action 1.17), ECAS (action 1.18), standards and specifications for CAMSS (action 2.02) MT@EU (action 2.08), NIFO (action 4.2.03).

In addition, less than 16% (9) of EC officials were in a position to cite a number of national initiatives that the ISA programme reuses. These included national input on standards and specifications for CAMSS (action 2.02), interoperability frameworks for NIFO (action 4.2.03), national work on e-Signatures/ECAS (action 1.18). In addition, EC officials added national tools for the development of Assessment of ICT implications of EU legislations (action 3.01), ECI (action 1.12 – OSS ECI), Geospatial and e-government best practices for Reusable Inspire Reference Platform (ARE3NA) (action 1.17) and Establishment of a European Union Location Framework (EULF) (action 2.13).

Given that it is not sufficient to rely solely on the varying levels of knowledge of interviewees and online survey respondents when discussing results achieved by Member States in the establishment of ISA solutions, the evaluation team complemented the aforementioned findings with desk research. This analysis showed that the ISA programme has indeed reused results of Member States in developing solutions. These include Germany's results for the development of the Online Collection Software to support European Citizens' Initiatives (action 1.12), the work of France, the UK and Luxembourg as the basis for the development of the European Legislation Identifier (action 1.21), selection methods in Member States, primarily the Netherlands and the UK, for CAMSS (action 2.02), the work of Latvia, Estonia, and Lithuania that was used as part of the development of machine translation – MT@EU (action 2.08) and the future generalisation of Latvia's "Football" application¹⁵⁶, which allows citizens to locate the closest public institution, to find the related contact information and to provide comments about the received service (action 2.18 Participatory knowledge for supporting decision making).

¹⁵⁶ Diana Germane, 'The efficiency of public administration in the EU is determined by staff professionalism and motivation', The Latvian Presidency of the EU Council 2015, Riga, 20.03.2015.

3.7.9 Public consultations launched by ISA

Based on the lessons learnt from the previous programme, ISA should have intensified the use of public consultations to ensure broad and comprehensive involvement of the relevant stakeholders groups. Indeed, only two public consultations were carried out under the IDABC programme from its beginning in 2005 until the 30 January 2009. These consultations were linked to the EIF (European Interoperability Framework) and CAMSS (Common Assessment Method Standards and Specifications). This number of public consultations was judged as low by the IDABC final evaluation.

Overall, a total of eight public consultations were launched and conducted since 2010, three are ongoing and one is planned in early 2016 for the EIF/EIS revision. This is clearly an improvement, having already completed four times the number of IDABC with four to go. Table 23 below displays the public consultations that occurred since the beginning of the ISA programme. The evaluation concludes, therefore, that the ISA programme has been successful in ensuring the use of public consultations to ensure broad and comprehensive involvement of the relevant stakeholders groups.

Table 23 Public consultations launched by ISA

Year	Public Consultation	ISA action
February 2012	Public Review of three Core Vocabularies took place during January-February 2012 via the Joinup website	1.01 Promoting semantic interoperability [...]
February 2012	Consultation with the facilitators of communities: Recommendations for the European Commission and online community facilitators	4.2.02 - Community building [...]
February - March 2012	Public Review of the Asset Description Metadata Schema (ADMS) took place during February-March 2012 via the Joinup website	1.01 Promoting semantic interoperability [...]
May 2012	ADMS FOSS Public review in May 2012.	1.01 Promoting semantic interoperability [...]
December 2012 - mid March 2013	Public Consultation on the draft EUPL v1.2	4.2.05: Sharing and re-use strategy
January-February 2013	Public review of the Core Public Service Vocabulary	1.01 Promoting semantic interoperability [...]
May - July 2013	Public review of the DCAT Application Profile for data portals in Europe (DCAT-AP)	1.01 Promoting semantic interoperability [...]
February - March 2015	Public review of the Core Public Service Vocabulary Application Profile (CPSV-AP)	1.3 - Catalogue of Services [...]
June - August 2015	Public review of the first revision of the DCAT-AP	1.01 Promoting semantic interoperability [...]
June - August 2015	Public review of the extension of the DCAT-AP for geospatial data (GeoDCAT-AP)	1.01 Promoting semantic interoperability [...]
June - August 2015	Public consultation on the European Interoperability Reference Architecture	2.01 European Interoperability Architecture
2016	Consultation on the EIS/EIF Revision	5.02 EIS Governance Support

3.7.10 Conclusions

The following box summarises the main findings answering to EQ11: ‘To what extent did coordination of activities between Member States, including the ISA Committee, exist to ensure stakeholders’ engagement in the ISA programme?’ and EQ12: ‘To which extent were activities coordinated or aligned with the needs of other stakeholders with whom the Commission was supposed to interact in the framework of ISA?’

Conclusion N°13

The ISA programme coordinates formal activities well between Member States, including the ISA Committee; to ensure their engagement in the programme. Two-thirds of these stakeholders fully or somewhat agreed that interaction between ISA and its stakeholders was effective for a consistent exchange of information, views and best practices.

- Although the ISA programme could slightly enhance the quality of the preparation, delivery, diversity of participation and follow-up of its formal programme meetings, the evaluation found that it generally coordinated with Member States' representatives in a satisfactory way. Two thirds of all Member States' representatives fully or somewhat agreed that the management and execution of the ISA Committee meetings, the ISA Coordination Group and the ISA Working Group meetings were satisfactory.
- In addition, it is important to note that approximately two thirds of all events, which the ISA programme organised and held between 2010 and 2015, were held since 2013, i.e. after the interim evaluation. In a similar vein, 63% (25) of the 40 events organised by Member States between 2010 and 2015, in which the ISA programme participated, were held since 2013. These facts indicate a greater level of participation and interest of Member States in the programme as it continued and the effort of the ISA programme to ensure this.
- Three-quarters of Member States' representatives either fully or somewhat agreed that the management and execution of ISA programme events were satisfactory. Slightly less than three-quarters of all Member States' respondents fully or somewhat agreed that the electronic platforms (i.e. Joinup, the ISA website and dashboard) used by ISA to deliver consistent interaction between stakeholders and with the European Commission were adequate.
- Half of Member States' representatives either fully or somewhat agreed that results achieved at national level were reused by the ISA programme whereas almost a third neither agreed nor disagreed nor expressed an opinion. Only over a third of Member States' representatives were in a position to cite a number of national initiatives that the ISA programme reuses (cf. subsection 0). In addition, less than a third of Member States' representatives fully or somewhat agreed that ISA was effective in engaging stakeholders from their country.
- The evaluation also concluded that there is scope for individual national representatives on the ISA Committee, Coordination Group & Working Group to coordinate better with their own national colleagues on interoperability issues to better realise the programme's achievements.

Conclusion N°14

The ISA programme coordinates formal activities well with EC officials to ensure their engagement in the programme. Just over half of these stakeholders fully or somewhat agreed that interaction between ISA and its stakeholders was effective for a consistent exchange of information, views and best practice.

- Since the interim evaluation, significant improvements have taken place in high-level coordination between DGs with a focus on building institutional capacity, which the ISA programme has both contributed to and benefited from regarding interoperability. The ISA programme, through DG DIGIT, participates fully with DG CNECT, DG EMPL, DG RTD and others in the 'Inter-service Group on Public Administration Quality and Innovation' with a mission *"to pave the way for a modern, innovative public sector, which is open, transparent and more accountable, as a means to meet the EC goals of growth, competitiveness and jobs"*.
- Almost two-thirds of EC officials fully or somewhat agreed that the ISA programme raised awareness of the ISA solutions among the Commission DGs and services although just under a half of EC officials fully or somewhat agreed that ISA activities were sufficiently visible to their DGs. Three-fifths of EC officials either fully or somewhat agreed that the management and execution of ISA programme events were satisfactory.
- The ISA programme increased its presence at conferences and other events run by the EC, having been involved in over 60 events since its inception. Impressively, three-quarters of these events have taken place since the interim evaluation, which is a strong indication of the focus of the ISA programme to increase interaction with its stakeholders in EU institutions.
- Just over a half of all EC officials fully or somewhat agreed that the electronic platforms (i.e. Joinup, the ISA website and dashboard) used by ISA to deliver consistent interaction between stakeholders and with the European Commission were adequate.

However, a majority of EC officials neither agreed nor disagreed nor expressed an opinion that results achieved at national level were reused by the ISA programme whereas less than a third fully or somewhat agreed. Only one in six EC officials were in a position to cite a number of national initiatives that the ISA programme reuses (cf. subsection 0). Nevertheless, more EC officials (outside DIGIT) felt that ISA was effective in engaging stakeholders from their DGs than did not.

Conclusion N°15

The ISA programme coordinates activities well with stakeholders outside of the context of European public administrations, when appropriate, during the course of its activities to ensure their engagement in the programme.

- The ISA programme organised 23 events that involved other stakeholders between 2010 and 2015. It participated in 57 events organised by other stakeholders, such as standardisation organisations, industry and academic groups between 2010 and 2015. Almost two-thirds of these events took place since the interim evaluation.

Two in five ISA stakeholders fully or somewhat agreed that ISA was effective in engaging their organisation's stakeholders whereas a third did not provide an answer or neither agreed nor disagreed. Five sixths of ISA stakeholders fully or somewhat agreed that the electronic platforms (i.e. Joinup, the ISA website and dashboard) used by ISA to deliver consistent interaction between stakeholders and with the European Commission were adequate.

4 Recommendations

This chapter is divided into the following two sections:

- Recommendations from previous evaluations: this section presents the extent to which recommendations from the final evaluation of the IDABC programme and from the interim evaluation of the ISA programme have been taken into account by the ISA programme. It also assesses the current level of validity of the ones that have not been taken into account.
- Recommendations from the final evaluation: this section includes the main recommendations of the final evaluation which are derived from the conclusions presented at the end of subsections 3.1 - 3.7.

4.1 Recommendations from previous evaluations

4.1.1 *Final evaluation of the IDABC programme*

This subsection aims to assess the number of relevant recommendations of the final evaluation of the IDABC programme¹⁵⁷ taken into account in the implementation of the ISA programme as well as to verify the level of validity of recommendations of the final evaluation of the IDABC programme not taken into account by the programme.

As detailed in the Annex, the evaluation considers that 9 out of 11 recommendations made by the final evaluation of the IDABC programme have been taken into account in the implementation of the ISA programme. These four strategic (1, 2, 3 and 4) and five operational (6, 7, 9, 10 and 11) recommendations are the following ones:

- Recommendation 1: The IDABC management Committee should be strengthened by ensuring a higher-level engagement of senior policy and organisational management.
- Recommendation 2: The Commission should elaborate a strategic framework based on a problem analysis of interoperability.
- Recommendation 3: The Commission should have further open discussion with its stakeholders to agree on which part of the efforts and budget of the new ISA programme should be allocated to operate IT infrastructures, to develop new actions and to promote/reuse existing actions.

¹⁵⁷ Deloitte, Final Evaluation of the IDABC Programme, European Commission: Directorate General for Informatics, Brussels, 2009.

- Recommendation 4: The Commission should draft a stakeholder management and communication strategy plan to enhance the quantity of the stakeholder relations with the Member States and the 'outside world'.
- Recommendation 6: The Commission should create a monitoring tool, based on the strategic goals and objectives, of the actions it finances.
- Recommendation 7: Information in the rolling Work Programme should include more factual updates of project implementation.
- Recommendation 9: The Commission should ensure that the contractual frameworks are in place in due time for the launch of the next programme, allowing actions to be launched as soon as a Work Programme is adopted.
- Recommendation 10: Inter-service contacts at project manager level should be rendered more transparent.
- Recommendation 11: The Commission should evaluate the strategic consultation mechanisms related to the IDABC- ISA programme and increase its number of public consultations in order to obtain a better understanding of its stakeholders needs.

However, as also detailed in the Annex, two recommendations of the final IDABC evaluation were not or only partially taken into account by the ISA programme. Table 24 presents the assessment of the current level of validity of these four specific recommendations (Recom.) in light of the proposed follow-on programme, ISA².

Table 24 Validity of recommendations of the final evaluation of the IDABC programme

Recom. Number	Recommendation	Level of validity
5	A common 'promotion' document, focusing on the policy alignments and the synergies between the different eGovernment programmes should be produced.	This recommendation is considered as still valid. In fact, as mentioned in the conclusions related to the Coherence of the ISA programme (subsection 3.6.6), the levels of awareness about synergies were lacking among interviewees and survey respondents.
8	Information on project sustainability, financial and operational sustainability, should be rendered more visible and be explained better to external stakeholders.	This recommendation is considered as still valid in the light of the follow-on programme. As mentioned in Article 4 of the proposal for establishing ISA ² , actions launched or continued under the ISA ² programme shall demonstrate financial, organisational and technical sustainability. In that regard, it would be beneficial to include, in the ISA Work Programme, a mandatory section describing how all the actions will be sustained.

As a conclusion, the evaluation considers the two aforementioned recommendations of the final evaluation of the IDABC programme that were not at all or not fully taken into account as still valid in the framework of the ISA and ISA² programmes.

4.1.2 *Interim evaluation of the ISA programme*

This subsection aims to assess the number of relevant recommendations of the interim evaluation of the ISA programme taken into account as well as to verify the level of validity of the recommendations not taken into account by the programme.

As detailed in the Annex, the evaluation considers that 5 out of 11 recommendations made by the interim evaluation of the ISA programme have been taken into account in the implementation of the programme. These recommendations are the following ones, which are related to the groups of recommendations contained in the Communication of the interim evaluation of the ISA programme:

Group 1: Communication and raising awareness:

- **IE recommendation 8:** The ISA programme should reinforce the promotion and communication activities regarding the ISA solutions that have produced concrete results (e.g. existing solutions carried-forward from IDABC) by continuously participating in events at national level, organising ISA events (including a yearly ISA presentation) and issuing publications on these solutions, as well as by playing an active role in other EU activities or programmes supporting opportunities for the reuse of ISA solutions. In line with the recommendations, the ISA programme will increase collaboration with other stakeholders, i.e. other European institutions and the ICT industry. Furthermore, taking into consideration the evaluator's recommendation, it will identify relevant contacts within academia and private organisations that could bring added value through their involvement in specific ISA actions.

The final evaluation confirms that the programme increased collaboration with other stakeholders, and reinforced the promotion and communication activities through intensive participation to events in the period 2013-2015. Section 3.7 Coordination provides additional details about the results achieved by the programme on communication activities and awareness are available.

Group 2: Engagement of stakeholders and project management continuity

- **IE recommendation 3:** The ISA programme will give priority to activities to assess the ICT implications of EU legislation (action 3.01 Assessment of ICT implications of EU legislation), which Member States consider to be an important issue that had not yet been addressed¹⁵⁸.

¹⁵⁸ At the time of the interim evaluation.

The final evaluation confirms that the programme gave priorities to the Assessment of ICT Implications activities since 2013. As mentioned in Section 3.3.5, in the period 2013-2015, the programme achieved important results such as the first ICT Assessment for several policy domains working with DGs including DG HOME, DG JUST, SECGEN and DIGIT. The ICT implications of new EU legislation has been included in the Impact Assessment process (Better Regulation Guidelines). This has resulted in the ISA programme having a defined role to promote this exercise and support the DGs and services undertaking these assessments with guidance as part of this internal EC process, which ultimately aims to improve the quality of EU legislation.

- **IE recommendation 4:** The ISA programme should ensure continuity in the project management of actions by analysing the issues leading to the high overall turnover of human resources in the programme (even if it decreased between 2010 and 2012) and by identifying mitigation actions.

The final evaluation confirms that the programme took into account this recommendation considering that since 2013 the turnover rates have drastically decreased, reaching 0% in 2015 (as of mid-2015). Additional details are available in Section 3.2.4 in Efficiency.

Group 3: Avoiding overlaps and duplications, increasing reusability and ensuring sustainability

- **IE recommendation 10:** The ISA unit will identify actions producing concrete results by reviewing ISA solutions every two years as specified in Article 13(2) of the ISA legal decision.

The final evaluation confirms that the review of ISA solutions was conducted during the course 2013 and updated in 2014. The results of these reviews were presented to the ISA Committee's members.

- **IE recommendation 11:** The ISA programme should consider in due-time the sustainability of the ISA actions by identifying different sustainability options, such as charge-back methods, financial support from Commission services that have developed specific ISA solutions, and financial support from an ISA follow-on programme or other EU programme.

This recommendation was also taken into account by the ISA programme considering that some ISA solutions were transferred to CEF in due time, and that the proposed ISA follow-on programme can carry forward some of the existing ISA solutions.

However, as also detailed in the Annex, whereas one could not be assessed by the evaluation, five recommendations made by the interim evaluation of the ISA programme were not or only partially taken into account by the programme. Table 25 presents the assessment of the current level of validity of these specific recommendations (Recom.) in light of the proposed follow-on programme, ISA².

Table 25 Validity of recommendations of the interim evaluation of the ISA programme

Group	Recommendation	Level of validity
Group 1: Communication and raising awareness:	IE recommendation 1: The ISA programme must ensure that all stakeholders involved in the ISA programme are well aware of the objectives of each action, the contribution of these actions to the programme's objectives, and the intended and actual results.	The ISA solutions that are already operational have been made available in a dedicated section of the official ISA website called 'Our ISA solutions for you'. This section aims to increase the awareness of the current results of the programme amongst stakeholders. However, a lack of awareness of key stakeholders on major aspects of the programme, including whether actions were used by the targeted stakeholders, has been identified in the interviews as well as on the online survey. This recommendation is considered as still valid in the light of the follow-on programme. Nevertheless, the evaluation found that the ISA programme has made significant efforts in this regard to increase awareness levels since the interim evaluation of the ISA programme and is going in the right direction to address this recommendation but needs to be targeted in the follow-on ISA ² programme.

Group	Recommendation	Level of validity
	IE recommendation 5: The ISA programme should conduct regular meetings with all action owners, within and outside the ISA unit, to exchange information on the current progress of the actions and explore potential synergies (based on the future development of the actions).	This recommendation is considered as still valid. In fact, in addition to regular meetings with all the action owners within the ISA unit, regular meetings should also be held with ISA actions owners, outside of the ISA unit, to raise more awareness on the different ISA actions (e.g. current progress, potential synergies).
Group 2: Engagement of stakeholders and project management continuity	IE recommendation 7: Members of the ISA Working Groups, established by the ISA Committee, should report nationally to the ISA Coordination Group members to ensure that ISA solutions are aligned with the needs and initiatives at national level.	The extent to which the ISA Coordination Group coordinates with the ISA Working Groups has been assessed among the Member States' representatives via interviews and online surveys. The combined rather elevated percentage (36%) of respondents who neither agreed nor disagreed or did not express an opinion on this point indicates that Member States' representatives could be more active in communicating on the ISA programme and its results at national level. No formal mechanism exists to ensure that members of the ISA Working Groups report nationally to the ISA Coordination Group members to ensure that ISA solutions are aligned with the needs and initiatives at national level. It is important to have the link between the members of these groups and users of ISA solutions at national levels to increase user-centricity of the ISA ² programme.
Group 3: Avoiding overlaps and duplications, increasing reusability and ensuring sustainability	IE recommendation 2: The ISA programme should apply a business case approach in the selection of new actions proposed by Member States and Commission services and involve the Commission's IT governance bodies in the evaluation of business cases for proposals from the Commission services.	Although the ISA programme presents its annual work programme to the ISPMB, the selection of new actions' proposals is not systematically done through a business case approach, for example as was the case for Sharing & Reuse (e.g. the problem statement and the consequence of not addressing this specific problem are not always clearly identified). (cf. Recommendation N° 5).
	IE recommendation 9: The ISA programme should establish a control mechanism to ensure the reuse of ISA solutions, besides interoperability, related to both carried forward solutions from IDA and IDABC and new ISA solutions already producing concrete results within the lifecycle of the programme.	There is currently no control mechanism established to ensure the reuse of ISA solutions. Moreover, the template used to submit proposals for new actions does not require a description of the needs for reuse in a dedicated mandatory section yet. This recommendation is still considered as valid in that regard (cf. Recommendation N°9).

As a conclusion, the evaluation considers the five aforementioned recommendations of the interim evaluation of the ISA programme that were not at all or not fully taken into account as still valid in the framework of the ISA and ISA² programmes.

4.2 Recommendations from the final evaluation

The recommendations, contained in this chapter, have been created based the evaluation's conclusions as a means of building on the ISA programme's achievements and addressing areas of its underperformance. The evaluation's conclusions were rigorously tested, confirmed and challenged, based on the triangulation of data and testing the intervention logic.

The conclusions found that the programme does 'facilitate the efficient and effective electronic cross-border and cross-sectoral interaction between European public administrations' and the ISA² proposal will extend this, appropriately, to citizens and businesses. However, there is a need to focus on improving the reuse of ISA solutions and addressing new evolving needs. In addition, there is a need for improving the coordination of initiatives at EU level, in particular among DGs, in the framework of the 'Inter-service Group on Public Administration Quality and Innovation', and between Member States and the Commission to ensure greater coherence with other EU and national initiatives and coordination with stakeholders.

The ISA programme has been effective in achieving its objectives and delivering operational solutions facilitating effective collaboration between European public administrations, but to a lesser extent for the assessment of ICT implications of new EU legislation. Overall, the achieved and anticipated results and impacts of the ISA programme largely address the business needs that they intended to although some actions have much greater utility than others. As long as an individual ISA solution is successful, its sustainability can be ensured through concrete plans for financing its operations and maintenance.

The overall strategic approach taken by the programme since 2013 demonstrates that a coherent holistic approach within the framework the ISA programme does exist, even though stakeholders are often more familiar with individual actions than the programme itself. Synergies were achieved between programme actions quite well and with other EU activities fairly well; nevertheless, further synergies could have been achieved. The programme coordinated its activities well with its stakeholders to ensure their engagement and should build on this considerable investment. However, levels of awareness of the stakeholders about several aspects of the programme are disappointingly low, which hindered its potential to perform better in all evaluation criteria. The evaluation has identified a number of key areas where changes to the current programme have the potential, collectively, to be more relevant to the current needs on interoperability and to improve programme's utility. Some of these recommendations echo, at least in part, some of those arising from the interim evaluation of the programme.

4.2.1 *Strategic recommendations*

The evaluation considers that the main challenges of the programme are best addressed through six strategic recommendations intended to facilitate the transition to the successor programme, ISA². Naturally, the programme operates within the context of this successor programme to be finalised in 2015 in the presence of other similar and complementary EU initiatives in the area of interoperability.

Recommendation N° 1: The ISA² programme, which serves an EU policy, should continue to align itself with other relevant EU policies.

The ISA² programme, which serves an EU policy, should continue to align itself with other relevant EU policies (Conclusion N° 1), take account of the revised European Interoperability Strategy, from 2016 onwards, and be aligned with the Digital Single Market Strategy (Conclusion N° 3) in the context of the forthcoming ISA² programme.

The current approach taken by the programme should be slightly changed in order to better reflect the current needs of stakeholders. More emphasis on having solutions operational and ready-for-use (Conclusion N°6) should be considered as an important prerequisite and strategy driver for the implementation of the follow-on programme (Conclusion N° 2).

More specific exploitation of synergies with other initiatives and programmes from DG CNECT (e.g. CEF) and other sectors should be reflected in the next programme' strategy assuming, also as mentioned above, an expansion of programme' scope. In this regard, the ISA programme should continue to build on the significant improvements in high-level coordination between DGs that have taken place since the interim evaluation, particularly in the framework of the 'Inter-service Group on Public Administration Quality and Innovation' with DG CNECT, DG EMPL, DG RTD, since this is an important need stressed by most stakeholders involved in the final evaluation (Conclusion N° 2).

These improvements have addressed the recommendations of the interim evaluation and the ISA programme's continued effort would contribute greatly to its objective to better 'facilitate the efficient and effective electronic cross-border and cross-sectoral interaction' between European public administrations; not only by providing the overview of the existing "holistic" approach of the programme and the performance of its actions but also by clarifying where additional synergies between actions, and with other EU initiatives, could occur.

Recommendation N° 2: Support the revision and implementation of the EIS

Based on Conclusion N° 11, the evaluation confirms that the current EIS was only partially taken into account in the design and real implementation of the programme. In fact, the

European Commission is in the process of revising, in close cooperation with the Member States, the European Interoperability Strategy (EIS) and European Interoperability Framework (EIF). We recommend that the successor programme support the review of the EIS and its implementation.

The alignment between the programme and the strategy should be monitored regularly, as recommended in the EIS implementation review 2012. This can be achieved only if the revised EIS vision, objectives and activity clusters will be agreed among and clearly understood by the various stakeholder groups, but also through monitoring mechanisms based on a set of measurable indicators as it is done for the Monitoring & Evaluation of the ISA Programme. Indeed as mentioned in Conclusion N° 11, it was not evident how each individual ISA action made significant progress towards the high-level EIS objectives and vision set in 2010.

Recommendation N° 3: Continue to focus on the current ISA activities but more emphasis on legal and organisational interoperability

As well as continuing to improve the effectiveness of common frameworks, common services and reusable generic tools, the Commission, through the successor programme, ISA², should increasingly focus on legal and organisational interoperability to ensure the sustainability of the actions and its objectives. Furthermore, while the programme contributed to the establishment of common frameworks supporting both organisational and legal interoperability for sharing and re-use, results from the ISA actions are scattered and clearly need more development (Conclusion N° 7). The successor programme should build on the experience of the EIF Revision, the input provided by the NIFO action on organisational interoperability, as well as the results of the sharing & reuse action.

ICT impact assessments should focus on new Commission initiatives (ex-ante) and adopted legislation (ex-post); in other words, these assessments should focus on both regulatory impact assessments and evaluations. This is instrumental to position the new programme within the EU policy cycle anticipating interoperability issues to be tackled as a priority.

This evaluation also confirmed that ICT impacts assessments are an important need expressed by Member States within both the IDABC and the ISA programme.

As mentioned in Conclusion N° 7, although neither the European Commission nor Member States widely used the method developed under this predecessor programme, the assessment of ICT implications of new EU legislation has now been included in the Impact Assessment process (Better Regulation Guidelines). This has given the ISA programme a defined role to exploit to promote this exercise and support the DGs and services undertaking these assessments with guidance as part of this internal EC process. The ISA programme should establish a formal link with the Commission IT Governance in order to provide the results of these ICT Assessments to the relevant bodies.

Recommendation N° 4: Update and implement a communication strategy for the programme, with a focus on targeted engagement including sector-specific stakeholders

Although the conclusions found that the ISA programme clearly invested a lot of effort and resources in successfully enhancing its formal coordination with its EC, Member States and even other stakeholders, who were broadly satisfied with this (Conclusion N°13, 14 and 15), levels of awareness about this programme remain disappointingly low given this investment, as mentioned in Conclusion N°9.

Even if a dedicated communication strategy was established in 2011 by the programme, this should be updated to strategically run the programme's activities by selecting the relevant communication actions and targeting the right stakeholders. Additionally, a stakeholder analysis could provide an updated and clear view on the stakeholder groups, which are relevant to the ISA programme, and the overall perception of these stakeholder groups towards it. An updated communication strategy, accompanied by a stakeholder analysis would enable the programme to increase stakeholder engagement and, therefore, address the gap between the actual performance of the programme and the different stakeholders' perceptions of it. In particular, the ISA programme should focus much more on addressing the relevant sectoral services in the EC, in a systematic way, to ensure that interoperability features as part of EU-level solutions and programmes of other DGs.

The efforts of this strategy should be directed to those stakeholder groups identified in the stakeholder analysis and should encompass Member States, Commission DGs and other European institutions willing to adopt existing ISA solutions based on their needs. As part of this, the ISA programme should leverage the best practices of its international peer programmes, for example, by engaging and securing the support of external stakeholder groups, such as business or professional associations, which could potentially benefit from increased efficient and effective electronic cross-border and cross-sectoral interoperability, to, in turn, encourage European public administrations to adopt ISA solutions.

Recommendation N° 5: Develop a more systematic business-case approach

Along the lines of Recommendation N° 2 of the interim evaluation, it should develop a business-case approach for the annual selection of new actions and to identify different financing options for ongoing actions based on its current work in the area of cost-benefit assessment of interoperability.

This should occur by using defined eligibility criteria, as is likely to be the case in the ISA² programme based on its legislative proposal, which would provide clear guidance for stakeholders. Developing this business-case approach can also draw on the Monitoring & Evaluation reporting and the study on the cost-benefits of interoperability that are ongoing. This business-case approach will help to ensure the rationale for every action.

4.2.2 *Operational recommendations*

While strategic recommendations represent a continuation and intensification of existing activities and actions, operational recommendations provide emphasis on potential measures to improve the programme's operational performance.

Recommendation N° 6: Respect the targets of the programme's envisaged staff levels

Based on Conclusion N°5, the allocation of human resources on behalf of the European Commission is inadequate to ensure a smooth delivery of the ISA actions and does not adhere to what was envisaged in the distribution of resources contained in the programme's legislative proposal⁵⁰. In fact, even if the number of ISA actions has been steadily increasing from 2010 to 2015, the number of ISA human resources has been growing only very slightly. Depending on the number of actions that will be included as part of the follow-on programme, additional resources could be needed in order to ensure a smooth delivery of its actions. In addition to already existing skills brought by Commission officials and Seconded National Experts on technical, semantic and organisational interoperability, more knowledge should be developed on legal interoperability issues. This is also along the lines of conclusions that were drawn at the time of the interim evaluation of the programme.

Recommendation N° 7: Build on the improvements in coordination of activities related to interoperability and eGovernment across the Commission

The Commission, i.e. the programme and the other EU initiatives, should build on the improvements in coordination of activities related to interoperability and eGovernment that it has achieved since the interim evaluation (Conclusion N°12).

Although the evaluation notes that there were several studies mandated by different Commission DGs in the area of interoperability and eGovernment services, it accepts that it is normal and understandable that cross-cutting policy issues draw the attention and have the involvement of different stakeholders to continuously provide different inputs and expertise to contribute to the evolution of public policy in those areas..

The evaluation recommends that ISA programme and DG DIGIT to work with these relevant DGs to increase the EC's coherence on these topics, through enhanced coordination, notably, in the Inter-service Group on Public Administration Quality and Innovation and also in its publications, such as the NIFO and eGovernment factsheets..

Recommendation N°8: Continue to document ISA solutions, and their building blocks in EUCart and Joinup.

The Commission should document the existing services and tools established or improved by the ISA programme (Conclusion N°6) within the European Interoperability Cartography (EUCart) applying the principles and guidelines from the European Interoperability Reference Architecture (EIRA).

As confirmed by Conclusion N°11, EIRA and the EUCart are considered as central instruments to share and develop interoperability solutions to European public administrations.

As confirmed by some Member States during the ISA Coordination Group meeting in October 2013, the follow-on programme should continue its contribution to both EIRA and EUCart in order to provide the overall big picture on interoperability at EU level.

This is necessary to ensure that other Commission DGs and Member States are aware of potential solutions, as well as building blocks, to be reused.

Also, the Commission should ensure that all existing ISA common frameworks, ready-for-use, are documented in and accessible via Joinup, which is indeed considered as an adequate platform to deliver consistent interaction among ISA stakeholders (Conclusion N° 13, 14, 15). This is an important prerequisite for the implementation of frameworks by the targeted stakeholders. In this regard, the results from the European Interoperability Framework, currently under revision, and from the Organisational Interoperability review, undertaken by action 5.02 EIS, should be taken into account.

Recommendation N°9: Develop a more systematic approach to support the use of common services and generic tools, but also the application and implementation of common frameworks.

Expanding on Recommendation 9 of the interim evaluation, the evaluation recommends continued focus on supporting the actual use of common services and reusable generic tools, but also on the actual application and implementation of common frameworks by the targeted stakeholders. Since the actual use of frameworks is difficult to measure, the evaluation recommends that the follow-on programme identify mechanisms for promoting use and monitoring their adoption. Specific indicators need to be developed going beyond indicators such as the number of downloads or views from the Joinup platform, which do not reflect the reality on their current application.

These mechanisms can then be monitored in the context of the horizontal governance, mentioned above, (Recommendation No 3) and implemented within a specific market observatory similar to the one to ensure the implementation of the EIF at national level through action 4.2.03 National Interoperability Framework Observatory. Identifying synergies for the ISA

programme in the context of supporting the review and implementation of the EIS, which is also recommended by this evaluation (Recommendation N° 2), could be included in this proposed market observatory as well.