ISA^2 WORK PROGRAMME

2017

SUMMARY

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1. THE CONTEXT

1.1 THE NEED FOR THE ISA² PROGRAMME

In today's Europe, citizens are free to work in and relocate to any country in the European Union, and companies are free to operate throughout the EU. They frequently have to interact with Member States' administrations, and are increasingly doing so electronically. Member States are gradually modernising their administrations by improving their business processes and ICT infrastructure, thereby reducing their administrative burden and costs while increasing the efficiency and effectiveness of public services.

However, there is still a high risk that these changes will give rise to electronic barriers ('e-barriers'), due to their national scope and a lack of interoperability at European level. Such barriers would prevent citizens and companies from interacting electronically with a foreign administration with the same ease as locals. This could impede the success of the digital single market.

Organisational issues, such as the complexity of public administrations and governmental procedures, cultural differences, and the lack of cooperation between public administrations, are also a major barrier to interoperability.

At national level, Member States may opt for mutually incompatible solutions to address these barriers. Rather than boosting efficiency and savings, this would only create new barriers to the delivery of European public services in the internal market.

An EU programme would best address the need to modernise public administrations, by improving electronic interaction among Member State administrations and the way administrations interact with citizens and companies.

The ISA² (pronounced 'ISA squared') programme, which builds on the successful ISA programme, has the following objectives:

a. to develop, maintain and promote a holistic approach to interoperability in the EU in order to eliminate fragmentation;
b. to facilitate efficient and effective electronic cross-border or cross-sector interaction among European public administrations and between European public administrations and companies and citizens;
c. to contribute to the development of a more effective, simplified and user-friendly e-administration at the national, regional and local levels of public administration;
d. to identify, create and implement interoperability solutions that support EU policies and activities;
e. to facilitate the reuse of interoperability solutions by European public administrations.

ISA² builds on the results of the ISA programme, broadening its scope to interaction between public administrations, citizens and companies. Its stakeholders remain broadly the same. It plans to finance both existing and new and innovative solutions.

1.2 THE POLITICAL CONTEXT

The ISA[2] programme should be seen in the overall context of a number of other EU initiatives:

- The roadmap linked to the Commission communication *A digital single market strategy for Europe* recognises that interoperability and standards are key to the successful implementation of the digital single market. The strategy expresses the need to revise and extend the scope of the European interoperability framework. The revision and implementation of the European interoperability framework and the European interoperability strategy are part of the ISA[2].

- The Commission's 2013 annual growth survey[1] makes it clear that it considers the cross-border interoperability of online services and the digitisation of European public administrations to be important contributors to growth and increased efficiency. Interoperability between administrations makes it possible to deliver digital services more effectively and with more efficiency, while sharing and reusing existing interoperability solutions could reduce costs.

- The Europe 2020 strategy[2] seeks to turn the EU into a smart, sustainable and inclusive economy, delivering high levels of employment, productivity and social cohesion. It addresses a number of key challenges which directly relate to the modernisation of European public administrations.

- Other initiatives contribute to the modernisation of public administrations, such as Horizon 2020,[3] the Connecting Europe Facility[4] and networks like the European Public Administration Network (EUPAN) and the European Structural and Investment Funds. (ISA[2] ties in with the last two by ensuring that funded national projects are aligned with EU-wide interoperability frameworks and specifications).

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[1]   Commission 2013 annual growth survey, COM(2012) 750 final, 28.11.2012.

[2]   Commission communication *Europe 2020: A strategy for smart, sustainable and inclusive growth*, COM(2010) 2020 final, 3.3.2010.

[3]   Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 — the Framework Programme for Research and Innovation 2014-2020 and repealing Decision No 1982/2006/EC (OJ L 347, 20.12.2013, p. 104).

[4]   Regulation (EU) No 1316/2013 1316/2013/EU 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 (OJ L 348, 20.12.2013, p. 129).

2. THE ISA[2] PROGRAMME

The European Parliament and the Council adopted the Decision on interoperability solutions and common frameworks for European public administrations, businesses and citizens (the ISA[2] programme) on 25 November 2015.[5]

The ISA[2] programme will support and promote:

a) the creation, improvement, operation and reuse of existing cross-border and cross-sector interoperability solutions;

b) the assessment of the ICT implications of proposed or adopted EU legislation and the identification of areas in which new legislation could promote interoperability;

c) the creation of a European interoperability reference architecture (EIRA), to be used as a tool for building and assessing interoperability solutions;

d) the creation of a tool that would facilitate the reuse of existing interoperability solutions and would help identify the areas in which such solutions are still missing;

e) the assessment and promotion of existing common specifications and standards and the development of new common specifications and standards; and

f) the introduction of a system that would measure and quantify the benefits of interoperability solutions.

The ISA[2] programme is implemented by means of projects and accompanying measures supporting implementation. In this connection, due consideration will be given to the policy context, in particular the digital single market, the European interoperability strategy, and the European interoperability framework,[6] but also to ICT standards priorities and the use of public procurement to foster standards uptake and interoperability, for example through the development of an EU catalogue of ICT standards.

The ISA[2] Decision requires the Commission to establish a rolling work programme to implement the ISA[2] programme over its full duration. This document sets out this work programme.

3. STRUCTURE OF THE WORK PROGRAMME

The work programme is set out in this document in a way designed to help identify links between similar initiatives by grouping them into 'packages'.

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[5]   Decision No 2015/2240.

[6]   See Annex II to the communication *Towards interoperability for European public services*, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0744:FIN:EN:PDF.

Actions are divided into the following packages:

- **Key and generic interoperability enablers** are actions which develop generic key interoperability solutions to support public administrations in providing services.
- The **semantic interoperability package** consists of initiatives around establishing and enhancing semantic interoperability among public administrations.
- Under the **access the data / data sharing / open data** package, the ISA^2 programme funds actions which help open up national data repositories, facilitate the reuse of data across borders and sectors, and widen access to data created by the public sector.
- The **geospatial solutions** package brings together all initiatives linked to the use of geospatial data in the public and private sectors.
- The **eProcurement / e-invoicing** package brings together all Commission initiatives in the field of eProcurement.
- The **decision-making and legislation** package covers actions supporting the decision-making process, in particular by enhancing interoperability between EU institutions and between them and the Member States. These actions address various processes from the collection of feedback from various stakeholders through the drafting of new legislation, to the monitoring of this legislation's implementation.
- The **EU policies — supporting instruments** package covers actions which support the implementation of EU policies.
- **Supporting instruments for public administrations** are actions which develop support solutions that can help public administrations build interoperable services.
- The **accompanying measures** package consists of activities to do with the promotion of instruments funded under ISA^2 and the monitoring of the actions' implementation.

The actions are decided on the basis of proposals made by the Commission and Member States. Actions relevant to particular policy areas are decided on in close coordination with the Commission department(s) responsible for the policy area, in line with the Commission's IT governance.

Actions under the ISA^2 programme are continuously coordinated and aligned with work carried out under the digital single market strategy (e.g. the priority ICT standards plan and the EU catalogue of ICT standards), the European eGovernment action plan 2016-2020,[7] the 'single digital gateway', and CEF-Digital (the Connecting Europe Facility), as well as with the Commission's internal ICT strategy.[8] Likewise, the ISA^2 programme supports these and similar initiatives whenever they contribute to interoperability between EU public administrations.

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[7]   http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0179

[8]   http://ec.europa.eu/dgs/informatics/ecomm/index_en.htm

3.1 KEY AND GENERIC INTEROPERABILITY ENABLERS

The following actions funded by the ISA[2] programme identify, promote and support the definition and implementation of key interoperability enablers:

− Action 2016.28 — *access to base registers*: This builds on existing solutions for cross-sector interoperability at national level and single-sector cross-border interoperability at EU level to identify best practices and requirements for the cross-sector and cross-border interoperability of base registers. The action will complete the state of affairs study launched under the ISA programme to collect best practices in implementation and provide recommendations for public administration. In 2017 the action will investigate the base registry interconnection and the 'once-only' principle in the individual Member States. This is a pressing priority, as it is needed in order to develop the right policies on the European level and also to identify missing solutions and will collect existing ones into a common repository of reusable solutions, organised according to the EIRA.

− Action 2016.29 — catalogue of services: There is a need to standardise the descriptions of services offered by national and EU services to support the free movement of goods, services and people, and to catalogue them at a later stage. With ISA funding and in cooperation with representatives of the 'points of single contact', work under this action has already resulted in a standard specification to describe services in a harmonised way to cover all life and business events in the context of public services. Already pilot projects run with Member States on the use of the common specification (CPSV-AP). In 2017, the focus is on extending the CPSV-AP to even more pilot projects in national and European points of single contact and digital gateways. Work under this action will support the future 'single digital gateway' initiative.

− Action 2016.02 — *provision of a private secured network (sTESTA):* This network connects national administrative networks and the internal networks of the European institutions. It is a secure way of exchanging information among Member States and with the EU. It is used by many Commission departments, e.g. OLAF, MOVE, EMPL, ESTAT, HOME (SIS II and VIS networks), SANTE, CDT, MARE, TRADE, and other EU institutions (e.g. Europol) and agencies. In 2017, work on this action will focus on making TESTA the sole and only secure network of choice of the European Union for all data transactions between Member State, EU institutions, EU agencies, EFTA countries, acceding countries and members of community programmes. The emphasis is on investigating the future governance model, architecture and procurement.

− Action 2016.09 — *IPv6 framework for European governments:* Funding has been suspended.

− Action 2016.19 — *e-TrustEx*: This provides support for the secure exchange of documents, for example in areas where national parliaments are involved in legislative work at EU level (as a consequence of the Lisbon Treaty), or in the application of EU legislation on competition. This action re-uses modules from the ePrior project and serves as a reusable component for many EU projects that need secure information exchange.

− Action 2016.26 — *interoperability agreements on electronic documents and electronic files:* This action addresses the need for interoperability agreements on electronic documents and files, and started with an inventory of what already exists. In 2017, it will identify requirements for the different interoperability layers, in particular for matters relevant to sharing documents, such as integrity, confidentiality, and non-repudiation at national and EU level.

3.2 SEMANTIC INTEROPERABILITY

− Action 2016.07 — *promoting semantic interoperability among EU Member States:* This action promotes interoperability by:

a) increasing awareness of the importance of semantic interoperability and appropriate metadata management policies, and

b) supporting and promoting the development and dissemination of common specifications, best practices, experiences and lessons learnt in the area of semantic interoperability.

In 2016 the action supported the implementation of the core business vocabulary in the DG JUST business registers interconnection system (BRIS), the DCAT-AP specification in the DG CNECT pan-European open data portal (part of the CEF DSIs), the core vocabularies for the DG COMP state aid notification system, the introduction of core public service vocabulary in Estonia and its inclusion in the Maltese national data strategy as the starting point for developing national core data standards. These efforts will continue in 2017 together with further development using the open-source thesaurus management tool VocBench with the Publications Office. Furthermore in 2017 the action will continue investing towards innovative approaches to achieve application and data integration by applying semantic technologies and linked data. This will take the form of pilots to be organised with the active participation of Member States and relevant EU departments.

− Action 2016.12 — *semantic interoperability of the representation of powers and mandates:* This action will contribute to the semantic interoperability of the representation of powers and mandates that is necessary for the identification of legal persons as defined under Regulation (EU) No 910/2014 (the eIDAS Regulation). In 2016 the action laid down the requirements for the minimum set of personal identification data that uniquely represent a natural or legal person and in 2017 it will continue with the implementation of core person and core business vocabularies in the eIDAS interoperability framework.

− Action 2016.16 — *public multilingual knowledge management infrastructure for the digital single market:* This action's objective is to create a public multilingual knowledge infrastructure that supports companies, in particular in the language technology industry, with implementing the multilingual tools and features needed to improve the cross-border accessibility of e-commerce solutions. In 2017 the action will establish the core data model for multilingual taxonomies/terminologies. These taxonomies will be provided via a public multilingual knowledge infrastructure.

3.3 ACCESS TO DATA / DATA SHARING / OPEN DATA

Public administrations produce vast amounts of data, such as geographical information, statistics, weather data, traffic information, and data from publicly funded research projects. They do this to support their own work, but other economic operators also use the data when providing services to their customers.

The ISA[2] programme funds a number of initiatives which aim to improve the production, exchange, analysis and dissemination of and access to data in various areas.

— Action 2016.06 — *sharing statistical production and dissemination services and solutions in the European Statistical System:* The European Statistical System, which comprises the statistical office and the public administrations responsible for the production and dissemination of official statistics in each Member State, collects data and compiles statistics for national and EU purposes. The objective of this action is to facilitate the sharing of statistical services and solutions in the European Statistical System, with a particular focus on dissemination of statistics. In 2017 the focus will be on producing a reusable solution for dissemination of statistical data (through SDMX standards) and a statistical reference architecture V1.0, and on making available a multi-tenant version of the European Statistical System (ESS) service catalogue.

— Action 2016.15 — *financial data standardisation:* The financial crisis in Europe underlined the importance of robust financial systems and the need to monitor their health via regular collection of reliable, high-quality data. Under current EU law, many stakeholders in the financial sector, including banks, public administrations and national regulatory/supervisory agencies, must report or act on financial data. Since 2009, the Commission (first DG MARKT, now DG FISMA) has taken part in international initiatives to improve data reporting to support financial stability. A common financial language is lacking, which increases the costs related to legal reporting requirements and makes it difficult to aggregate risk data and ensure that market monitoring is complete. This action aims to increase the reusability and interoperability of financial data by assessing the potential for further standardisation in this area. In 2017 the action will concentrate on analysing the requirements for common data reporting standards that will allow later the creation of data dictionaries and relevant support tools.

— Action 2016.18 — *development of an open data service, support and training package in the area of linked open data, data visualisation and persistent identification:* In 2012, the Commission launched the European open data portal to facilitate the sharing and reuse of data produced by the EU institutions. This action aims to support public administrations in publishing their data using various tools, such as a common knowledge base, a catalogue of reusable software tools, and implementation guidelines. In 2017 the action will create a common toolset for data visualisation

and reuse-oriented data management and data treatment (in particular linked open data). It will also set up the required governance structure and provide guidelines, training and data models for unique and persistent identification of data.

— Action 2016.11 — a*utomatic business reporting:* Funding of this action has been suspended.

— Action 2016.03 — *big data for public administrations:* The amount of data generated worldwide is increasing at an astounding pace, by 40 % each year, and is expected to increase 30-fold between 2010-2020. Because non-interoperable means are being used to describe data generated in the public sector, most of this data cannot be fully exploited. This action aims to address the use of big data by public administrations to support better decision making. In 2016 the action conducted a study of big data analytics for policy making, which is publicly available. In 2017 several software components will be developed by means of pilot projects with the respective communities.

3.4 GEOSPATIAL SOLUTIONS

— Action 2016.10 — European location interoperability solutions for eGovernment (ELISE): Location-related information underpins an increasingly high proportion of EU and national governmental policies, digital services and applications used by public administrations, companies and citizens. Although various studies point to the tremendous potential value of publicly and privately held location information, there are many obstacles to the efficient sharing and reuse of this information. The Directives on the re-use of public sector information (PSI), and on establishing an infrastructure for spatial information in the European Community (INSPIRE), and ISA have started to remove barriers and some Member States have introduced important initiatives in this field. However, there is much more potential to tap into interoperable location information: the implementation of INSPIRE is ongoing and new thematic policies are emerging and will benefit from a more harmonised approach. This action is a package of legal/policy, organisational, semantic and technical interoperability solutions that will facilitate efficient and effective electronic cross-border and cross-sector interaction between European public administrations, and between them and citizens and companies, in the field of location information and services. In 2016, ELISE continued the development of geospatial interoperability tools (e.g. the ARE3NA platform, the Re3gistry, and web search tools), piloted new activities on energy efficiency and marine spatial data sharing, carried activities to assess digital single market opportunities, started a pilot for an EU gazetteer service, and designed and piloted the Geo Knowledge Base service. 2017 takes ELISE into the 'execution' phase with development of frameworks and solutions, development and roll-out of pilots, and operation of the Geospatial Knowledge Base service.

3.5 E-PROCUREMENT / E-INVOICING — SUPPORTING INSTRUMENTS.

— The new public procurement directives (Directives 2014/23/EU, 2014/24/EU and 2014/25/EU) specifically state that tools and devices used for communicating electronically should be non-

discriminatory, generally available, and interoperable. One of the Directives' consequences is that e-Procurement will gradually become mandatory in the EU. From April 2016, eNotification and electronic access to tender documents will be mandatory. From April 2017, eSubmission will also be mandatory for central purchase bodies and from October 2018 for all contracting authorities. In addition, e-Certis (a mapping tool for evidence) and the European single procurement document will become mandatory from April 2016 onwards. The eInvoice Directive 2014/55/EU makes the reception and processing of electronic invoices mandatory by 2020.

— Action 2016.05 — *European public procurement interoperability initiative:* This action will help public administrations to fully meet the requirements of the eInvoice Directive by:

a) providing a set of reusable tools and services in the area of e-Procurement (e-Certis and the European Single Procurement Document – ESPD) are already available as services and in 2017 the rolling out of the service to Member States will be launched);

b) contributing to setting interoperability standards and to supporting interoperability initiatives like eSens in bringing software components to the maturity level required by the Connecting Europe Facility, with delivery of the core procurement vocabulary in 2017;

c) reducing the administrative burden and simplifying procedures for buyers and suppliers to encourage cross-border public procurement procedures.

3.6 DECISION MAKING AND LEGISLATION — SUPPORTING INSTRUMENTS

This package aims to create a fully automated legislative process in the EU, one that ensures effective, open and transparent access to legislation and facilitates active and collaborative participation by citizens, companies and other stakeholders. It includes a number of actions which cover various steps in the overall lifecycle of the legislative process. These will increase the efficiency of the regulatory process, reduce the administrative and financial burden, improve the quality of legislation, and facilitate accessibility to and the reuse and preservation of legislation.

— Action 2016.04 — *participatory knowledge for supporting decision making:* Funding for this action has ended.

— Action 2016.38 — *legislation interoperability tools (LEGIT):* This action proposes a set of reusable, fundamental, web-based building blocks that support and improve the electronic exchange of documents and metadata in the context of the legislative process and their conversion into different formats. For 2017 the action will focus on supporting the collaborative drafting, revision and the transmission of legislative documents in the 'ordinary legislative procedure' by further enhancing the LEOS software. It will develop solutions to address the bottlenecks identified in the landscaping exercise.

— Action 2016.23 — *ICT implications of EU legislation:* This action ensures that ICT implications are identified and assessed when EU legislation is drafted or evaluated, and that they are properly

taken into account in due course. This ensures that legislation is implemented in a way that is effective and timely, and at a reasonable cost. In 2017 the action will continue to screen new EU legislative acts and assess relevant ones. The action will also start to assess the cost-benefit of selected cases in the Commission and Member States using a methodology it developed in 2016.

⸺ Action 2016.08 — *the European legislation identifier (ELI):* the ELI is a flexible, consistent and reliable way of uniquely identifying legislative documents from different jurisdictions. It makes the documents readable and understandable by both humans and computers, and makes it easier to reference and share them at European level, while meeting the specific requirements of national legal systems. In 2017 the action will focus on solutions for data visualisation, data validation, editing & annotation tools, RDF transformation and MD retrieval. It will also provide solutions for processing legacy data and tools for searching semantic data.

⸺ Action 2017.02 — *integration of the retrieval of legislative data compliant with the European legislative identifier with the information systems for monitoring the application of EU law (ELI@EULAW)*: This action aims at creating a solution which enhances and simplifies the transmission and dissemination of legislation-related data, within the context of EU law proceedings, by integrating the ELI link within notifications to simplify working methods and avoid data inconsistencies and duplication.

– Action 2016.01 — *application of EU law: provision of cross-sector communication and problem solving tools (THEMIS):* Funding of this action has ended.

– Action 2016.17 — *interinstitutional framework for digital management of the ordinary legislative procedure*: To rationalise the underlying IT environment of the EU legislative process, a study was launched to get a comprehensive view of the overall life cycle of the interinstitutional legislative process (AS IS). This included business processes and roles, the technologies, tools and systems used in each major legislative step by each of the institutions, and the specifications used to structure and exchange information. For 2017 the focus is on the necessary specifications and transformation/mapping to facilitate the exchange of documents. The application of commonly agreed standards will allow automated validation and quality control.

– Action 2017.03 — *RefIT PLATFORM (IT TOOL):* The REFIT platform was set up as part of the Commission's 'better regulation' policy. The platform consists of 48 members from all Member States, including high-level experts from the national authorities of all Member States and the private sector. This action aims at developing an IT tool to facilitate smarter cooperation between the Commission, Member State government ministries and other experts in managing incoming suggestions and preparing positions on a large number of suggestions within a reasonable time. The IT tool should enable multiple external users to work on the same document, avoid document down- and uploads and serve as a repository for all incoming suggestions.

– Action 2017.04 — *Interinstitutional Register of Delegated Acts (REGDEL):* The objective of this action is to set up a joint register for delegated acts, that meets the needs of the three institutions (the

Commission, European Parliament, and Council) and makes drafting and adoption of delegated acts more transparent. This will give the Member States and the public at large a better view of the full life cycle of delegated acts from planning to entry into force.

3.7 EU POLICIES – SUPPORTING INSTRUMENTS

– Action 2016.13 — *common information-sharing environment:* Funding of the action is suspended.

– Action 2016.14 — *implementation of tools supporting European citizens' initiatives*: Following the revision of Regulation 211/2011, this action aims to strengthen the tools supporting citizens' initiatives in the following areas:

   a) improvements for citizens using the online software for collecting statements of support,

   b) improvements for organisers of European citizens' initiatives,

   c) interoperability improvements.

The action will also provide technical advice on the development of the legislative framework (risk analysis and impact assessment). In 2017 the action will deliver a cryptographic tool to encrypt XML files exchanged by Member State at every European Parliament election.

– Action 2016.24 *ABCDE — administration, business and citizens' data exchange in the domain of case management:* This action aims to provide interoperable solutions to support data exchange between the European Commission, Member State administrations, companies and citizens on EU competition policy cases (i.e. enforcement of antitrust/cartel rules, merger control, and State aid control). Data exchange involves various organisations such as Member State administrations and others (including law firms) located within the EU or even outside the EU. In 2017 the action will focus on delivering a set of common services (eRFI, eLeniency, eConfidentiality) and further establishing a common ABCDE architecture/framework.

3.8 SUPPORTING INSTRUMENTS FOR PUBLIC ADMINISTRATIONS

⸺ Action 2016.32 — *European interoperability reference architecture (EIRA)*: The EIRA gives an overview of cross-border and cross-sector interoperability needs at European level. It provides a structure for mapping existing operational interoperability solutions (covering different types of interoperability assets including infrastructure services, information systems, applications, software components, semantic assets, organisational assets and legal interoperability assets), and for identifying missing parts. Trans-European software solutions developed and operated by the European Commission have already been assessed, described and organised according to the EIRA (see Action 2016.36). By the end of 2016, the Commission will release a new version of the EIRA. In 2017, the focus will be to add interoperability specifications to the EIRA. The action will continue to

promote the adoption of the EIRA in Member States, including the implementation of pilot applications.

– Action 2016.33 — *European interoperability strategy (EIS):* Governance support is a continuous and parallel activity that analyses existing governance and organisational interoperability models and structures, investigates trends and changes in interoperability strategies in the Member States, and assesses EU policy developments that may have an impact on the EIS and its implementation. In 2016, this action supported the revision of EIS and the publication of the new Commission communication on interoperability. In 2017 it will focus on actions included in the EIS action plan, concerning the organisational aspects of interoperability, governance structures and processes.

– Action 2016.37 — *interoperability maturity model (IMM):* This is a method for verifying the level of interoperability of public services. To date, more than 30 public services at European and national level have been evaluated using the method. The IMM will be updated in 2017 based on the revised European interoperability strategy and European interoperability framework, and the feedback collected during real-life applications. In 2017, the action will also develop an IMM checklist and provide IMM as a service.

– Action 2016.27 *CAMSS — common assessment method of standards and specifications (CAMSS):* Funding for this action has ended. Action 2016.31 will continue to provide support for the methodology.

– Action 2016.34 — CIRCABC (Communication and Information Resource Centre for Administrations, Businesses and Citizens): The ISA[2] programme continues to cover the maintenance, evolution and, where relevant, operation of generic services. This action supports the activities of the many committees and expert groups assisting the Commission in its work.

– Action 2016.35 — *EUSurvey:* This action provides a multilingual tool that facilitates the creation of surveys and the collection of information to support the Commission's policy initiatives. Both the CIRCABC and the EUSurvey are published under an open licence and can be reused by other organisations with similar needs. In 2017, EUSurvey will be added to the Better Regulation portal to support the portal's objective of becoming the one-stop-shop for all Commission consultations of citizens and other stakeholders.

– Action 2016.25 — *interoperability test-bed:* This action will develop and host reference implementations of a test-bed. In addition, it will address the sharing and reuse of test assets (through a dedicated test registry and repository on Joinup, and a community of test-bed owners and testers).

– Action 2016.20 — *Joinup, the European collaborative platform and catalogue:* Joinup is a common platform which allows administrations to share and learn from best practices, and reuse interoperability solutions from a central catalogue. In 2016, this work:

    a) further improved the Joinup platform to provide a better user experience;

b) finished redefining the scope of the catalogue of solutions;

c) will implement the European interoperability cartography, to provide a highly structured set of building blocks and solutions to support administrations in providing interoperable public services;

d) supported the implementation of the EU catalogue of ICT standards for public procurement and provided an exchange platform for stakeholders to contribute to it.

In 2017, the action will continue to maintain both the generic catalogue of solutions and the European interoperability cartography. It will promote the Joinup platform as an authentic source of information on eGovernment and ICT in the public sector in the EU, and a one-stop shop for sharing and reusing IT solutions for public administrations in EU.

– Action 2016.22 — *Community building and effective use of collaborative platforms:* Funding of this action has ended. Activities under this action will be continued under actions 2016.20, 2016.30 and 2016.31.

– Action 2016.21 — *maintenance and further development of the national interoperability framework observatory (NIFO):* The NIFO plays a crucial role in ensuring that national interoperability frameworks are aligned with the European interoperability framework. It also helps Member States achieve alignment by providing an analytical model and gap analysis tools. The NIFO will be updated to better align it with the revised European interoperability framework and European interoperability strategy. In 2017 the observatory will be strengthened in its role as a respected and authoritative source of information on the state of play of interoperability and digital public services in Europe. This will allow the observatory to be linked with initiatives contributing to public sector modernisation such the digital single market, Member States' national digital strategies, the European semester economic coordination process, and the eGovernment action plan 2016-2020.

– Action 2016.36 — *assessment of trans-European systems supporting EU policies*: The identification, collection, documentation and assessment of trans-European systems (TES) managed by the Commission on behalf of or jointly with the Member States is needed. The systems are described in a common way and registered in a single cartography (TESCart). In 2017 the next steps include the update and extension of the TESCart to the entire TES base in the EC and the application and assessment of reusability and interoperability criteria to increase the reusability potential of TES.

– Action 2016.31 — *sharing and reuse:* The sharing and reuse of IT solutions used to provide digital public services has the potential to achieve much-needed savings. At the same time, reusing solutions will contribute to better harmonisation and coherence of services across the EU, and will make it easier for public administrations to interact and cooperate. This action has already produced a number of tools which can help public administrations to develop common and reusable solutions. In 2016, this action published a common framework on sharing and reuse of solutions. In 2017 shared and reused IT solutions will be given awards at a European-wide conference. The action will also support Open.PM², a Commission initiative to bring the PM²

methodology and its benefits closer to stakeholders and user groups beyond the original target group of European Commission project managers. Finally, it will take over the operation of the Open Source Observatory (the OSOR community) from action 2016.22.

− Action 2017.01 — *Standard-based archival data management, exchange and publication*: This action will start with a study aiming at identifying existing data standards in archival information management and exploring IT tools and services supporting them. The results will also help to show how these standards are applied in different contexts. The second part of the action will deal with analysis of requirements for interoperability between the Archives Portal Europe, Europeana, and the Historical Archives of the European Union (run by the European University Institute), on the one hand, and the Historical Archives of the European Commission, on the other. The action will also assess available options for publishing the relevant part of the content of EU archives in open data format, through the different available platforms (like the open data and the European data portals) allowing Member States, citizens and researchers to interact with them and reuse them in different contexts.

3.9 ACCOMPANYING MEASURES

− Communicating the solutions developed under the ISA² is a prerequisite for their widespread use. To this end, once the programme starts, a comprehensive communication strategy and campaign needs to be set up and maintained. Under the new programme, in 2016 communication activities (action 2016.30) included drafting an overall communication strategy and plan, setting up the programme's website and social accounts, and holding an ISA² conference. In 2017, the Commission will continue to hold workshops and participate in conferences in Member States to inform stakeholders about the reusable instruments developed under the ISA and ISA^2 programmes.

− Action 2016.36 — *monitoring and evaluation:* This action will support the monitoring and evaluation of the ISA^2 programme, by establishing relevant processes, setting up an appropriate set of tools and implementing and reporting on a monitoring programme. Close monitoring of the implementation and impact of actions funded under ISA^2 makes it possible to adjust the programme in time and ensure that it achieves the highest impact with the greatest efficiency.

4. BUDGET

A breakdown of the budget by action is given in Annex I. Annex II gives a tabular overview.

In order to optimise the use of the ISA^2 budget, appropriations for work programme entries for a given year may be brought forward to the preceding year in full or in part, if the overall expenditure under the ISA^2 programme in the preceding year so permits. Article 10(4) of the ISA^2 Decision (the 'flexibility clause') still applies.

As Article 9(2) of the ISA[2] Decision requires that the work programme be revised at least once a year, all budget requests for future years are estimates based on present knowledge of the scope and timing of the actions. These budget estimates may need to be revised in the light of new information or changing priorities, and are not to be regarded as final decisions on the fundability of future phases of specific actions or on the future ISA[2] budget to be made available for them.