

## ABCDE - ADMINISTRATION, BUSINESS AND CITIZENS' DATA EXCHANGES IN THE DOMAIN OF CASE MANAGEMENT (2016.24)

### IDENTIFICATION OF THE ACTION

Type of Activity	Common Services
Service in charge	DG COMP
Associated Services	DG DIGIT DG MARE DG AGRI

### EXECUTIVE SUMMARY

The ISA<sup>2</sup> Action "**ABCDE - Administration, Business and Citizens' Data Exchange in the domain of Case Management**" aims at providing interoperable solutions to support data exchanges between the European Commission, Member States' administrations, business and citizens in the domain of Case Management.

Case Management in the context of this ISA<sup>2</sup> Action comprises Competition policy in the European Union, that is to say the enforcement of the Antitrust / Cartel rules, Merger control as well as State aid control<sup>1</sup>.

Data exchange processes in Case Management are cross-border: they rest upon intense co-operation between the European Commission and the Member States<sup>2</sup>, where information systems are prone to reusability at European and international level<sup>3</sup>. Data exchanges cover various entities, such as Member States administrations and undertakings (including law firms) located within the EU or even outside the EU.

Data exchange processes in Case Management are cross-sector, covering: Fisheries, Agriculture, Energy and Environment, Information, Communication and Media, Financial services, Basic Industries and Manufacturing, Pharma and Health services, Transport and Post among other services.

ABCDE has three packages:

i. **Operation and improvement of existing common services**

Operation and improvement of existing cross-border or cross-sector common services (established under ISA or IDABC), serving EU interests and under the umbrella of ABCDE, namely:

- a. GENIS (suite of common services for State aid).
- b. ECN2.
- c. COMP eTrustEx.
- d. eQuestionnaire.

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<sup>1</sup> Potentially extensible to any sector and policy area carrying out dossier-centric and data exchange-intensive administrative services or investigations.

<sup>2</sup> In Antitrust, the European Commission and the National Competition Authorities (NCAs) enforce the same rules of law and coordinate their action through the European Competition Network (ECN). In Merger Control, the European Commission and the NCAs may refer cases to one another. In State aid control, enforcing the rules has become a shared responsibility between the European Commission and Member States following the State aid modernisation.

<sup>3</sup> This stems from the fact that (i) European and National authorities enforce the same or similar rules of law, and (ii) the business processes involved are similar.

## ii. **Development and operation of new ABCDE common services**

Development and operation of new cross-border or cross-sector common services serving EU interests, namely:

- a. eRFI<sup>4</sup>. Common service to support requests for information, sector inquiries and market investigations, to replace the ageing eQuestionnaire<sup>5</sup>. One National Competition Authority has already manifested their interest in reusing this common service. The European Competition Network could be used to promote its reuse among other authorities.
- b. eLeniency. Common service to support the European Commission's immunity and leniency programme in Cartel investigations. As eRFI, eLeniency is potentially reusable by National Competition Authorities of the Member States to support their national immunity and leniency programmes.
- c. eConfidentiality. Common service to support confidentiality negotiation of case files with the investigated undertakings.

## iii. **Establishment of a common ABCDE architecture / framework**

The subproject CESA (Competition Enterprise and System Architecture) will define and setup a common ABCDE architecture / framework that will ensure the long-term sustainability of the ABCDE interoperable solutions by maximising synergies and economies of scale, reducing operation, improvement, change and development costs.

## **OBJECTIVES**

The mission of ABCDE is to contribute to a better functioning of the internal market in the benefit of consumers, businesses and the European economy as a whole, thus endorsing European Union's political priorities such as the Digital Single Market, the Energy Union or a stable Financial Services sector.

In the context of scarce resources in public administrations, the main objective of ABCDE is to reduce costs and gain efficiency and efficacy in the enforcement of Competition policy by the European Commission and the Member States' administrations, while ensuring good governance. This will be achieved at different levels:

- ABCDE will help reducing costs by implementing and operating common e-services used by the European Commission and the Member States' administrations to jointly enforce European and National competition law, thus avoiding disparate IT investments by the EU Member States' administrations. The common services are: SANI2, ECN2, SARI, State Aid Transparency Data Collection, State Aid Recovery Interest Calculator and State Aid Collaboration Platform Pilot.
- ABCDE will make data exchanges in Case Management faster, more effective and cost-efficient, by implementing and operating efficient interoperable e-services benefiting both the main users and key stakeholders (European Commission services, Member States' administrations, business and citizens).
- ABCDE will promote the use and exchange of semantically consistent and highly qualitative data across European information systems in the Competition policy domain, fostering cross-sector and European-level interoperability.

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<sup>4</sup> During the preliminary analysis of eRFI, we analysed EUSurvey as a potential candidate. Given the wider scope of eRFI requirements which includes: knowledge base management, security constraints (e.g. Non-Repudiation), integration with Case Management back-ends, strong analytics capabilities, the preferred option was to develop eRFI. However we intend to leverage the existing know-how of EUSurvey, by observing its implementation approach (as 'lessons learned').

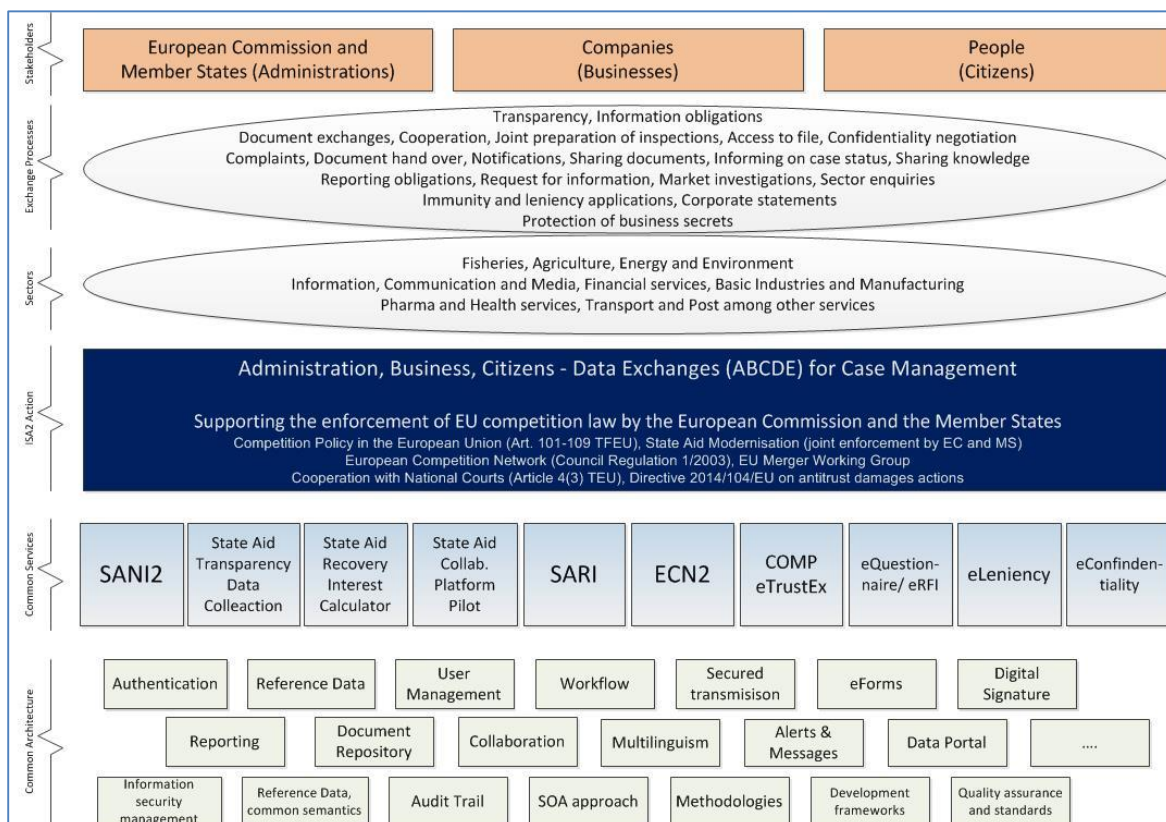
<sup>5</sup> The scope of eQuestionnaire was recently extended to cover not only Merger but also Antitrust and State Aid policy instruments. As a critical application it will be maintained and evolved until the release in Production of eRFI in 2020.

- ABCDE will reduce costs by implementing a common architecture / framework aiming at maximising synergies and economies of scale and reducing operation, improvement and development costs, ensuring the long-term sustainability of the ABCDE common services.
- ABCDE shall further help reducing costs by implementing and operating common services that can be reused by Member States' administrations (confirmed interest in re-using eRFI by already one NCA, potential of reusability of eLeniency). The ABCDE common architecture / framework (partially or as a whole) has also a high potential of reuse by Member States' administrations.

## SCOPE

ABCDE covers the cross-border and cross-sector data exchange processes with or among EU and Member States' administrations, business and citizens in the domain of Case Management, which are not covered by the CASE@EC<sup>6</sup> project. Case Management in the context of the ISA<sup>2</sup> Action comprises the Competition policy of the European Union as well as State aid control in all sectors including Fisheries and Agriculture. Case Management is potentially extensible to any policy area carrying out dossier-centric and data exchange-intensive administrative services or investigations. Commission's backend processes and internal exchanges (i.e. between Commission's departments and services) are out of scope of ABCDE.

The overall scope of the ISA<sup>2</sup> Action ABCDE is visualised in the diagram below.



The scope is defined in three packages:

<sup>6</sup> The CASE@EC project focuses on backend case management processes: document and record management; case handling and orchestration; case portfolio management; case team collaboration; e-discovery and evidence management etc. European Commission Services participating to the CASE@EC project are: DG COMP, DG TRADE, DG AGRI, DG MARE, DG BUDG and OLAF.

**Package I) Operation and improvement of existing common services****In scope:**

Operation and improvement of existing cross-border or cross-sector common services established under ISA or IDABC, serving EU interests, namely:

GENIS (ISA Action 1.11) common services: SANI2, SARI, State Aid Transparency Data Collection, State Aid Recovery Interest Calculator, State Aid Collaboration Platform Pilot, used by DG COMP, DG AGRI, DG MARE and the Member States' administrations of the 28 Member States to support the implementation of EU State Aid rules (Art.107 to 109, [Treaty on the Functioning of the European Union](#) (TFEU)).

ECN2 (ISA Action 2.9 - COMP Pilot) common service to support the European Competition Network (ECN), formed by DG COMP and the National Competition Authorities of the 28 Member States to share case information and case documents, supporting the implementation of Competition policy of the EU in particular Antitrust/Cartels investigations and Mergers control (Art. 101 to 106, TFEU and Merger Regulation 139/2004). ECN2 also supports exchanges between ECN and administrations of EFTA<sup>7</sup> countries. ECN2 improvements will support document sharing and collaboration between the European Commission and the National Courts of EU28, will support the implementation of the Damages Directive<sup>8</sup>, will offer e-signature capabilities and adapt to any updates in the ECN legislation expected in the medium term.

COMP eTrustEx<sup>9</sup> (ISA Action 1.8 - COMP Pilot) common service used by DG COMP, businesses (companies, law firms) and Member States' administrations to exchange large volume of sensitive documents in a secure way. COMP eTrustEx greatly supports the implementation of Competition policy of the EU.

eQuestionnaire (IDABC Action) common service used by DG COMP and businesses (companies, law firms) to request and provide structured information (requests for information, sector inquiries, market investigations) for case investigations. This tool is used cross-sector in Mergers control, Antitrust/Cartel investigations and State aid control.

**Package II) Development and operation of new ABCDE common services****In scope:**

Development and operation of new cross-border or cross-sector common services serving EU interests and in the scope of ABCDE, namely:

eRFI. Common service to support requests for information, sector inquiries and market investigations. eRFI will replace the ageing eQuestionnaire (developed under IDABC and in Production since 2009).

<sup>7</sup> The European Free Trade Association (EFTA) is an intergovernmental organisation set up for the promotion of free trade and economic integration to the benefit of its four Member States: Iceland, Liechtenstein, Norway, and Switzerland.

<sup>8</sup> Directive 2014/104/EU on antitrust damages actions.

<sup>9</sup> Covers the evolution and maintenance of the modules specially developed and used by DG COMP (GUI, adapter, COMP back-end interoperability layer). Maintenance of DIGIT's eTrustExchange platform itself is out of the scope of this action and will be financed by another ISA<sup>2</sup> action.

eLeniency. Common service to support the European Commission's leniency programme in Cartel investigations. Currently, the exchange process with businesses that is submitting leniency applications to the Commission is not IT-supported; hence it is human resources-consuming. eLeniency would be reusable by National Competition Authorities of the Member States to support their national leniency programmes.

eConfidentiality. Common service to support the confidentiality negotiation of case files with the investigated undertakings (businesses). Currently, this exchange process with businesses is not IT-supported, hence it is human resources-consuming.

### Package III) Establishment of a common ABCDE architecture / framework

#### In scope:

The common ABCDE architecture / framework will ensure the long-term sustainability of the ABCDE interoperable solutions by maximising synergies and economies of scale and reducing operation, improvement, change and development costs. The common ABCDE architecture / framework will focus on:

- Common information security management.
- Common business and Service Oriented Architecture (SOA) approach.
- Common interoperability: Common technical approach, common semantics, common specifications and standard exchange formats, common security implementation.
- Common methodological approach: PM2<sup>10</sup>, development methodologies.
- Common development frameworks and stacks.
- Common quality assurance approach and standards.

The common ABCDE architecture will operate and improve the reusable building blocks developed under ISA 1.11 GENIS and under ISA 2.9 DRS / ECN2 Pilot. The common ABCDE architecture / framework will be aligned to EIRA and EIC<sup>11</sup>, being potentially reusable in any similar context (sector, policy area, national administration) dealing with a large set of complex data exchange processes with external stakeholders that have to interoperate with both backend systems and external systems. ABCDE re-usable components will be published on EIC.

## ACTION PRIORITY

### Contribution to the interoperability landscape

Question	Answer
<i>Does the proposal directly contribute to implementing the European Interoperability Strategy, the European Interoperability Framework, or other EU policies with interoperability</i>	<b>Yes.</b> ABCDE common services follow and implement several of the EIF principles as user-centricity, transparency, preservation of information, technological reusability and adaptability. The action builds on the legal and organisational

<sup>10</sup> PM2 is the project management methodology of the European Commission.

<sup>11</sup> [European Interoperability Reference Architecture \(EIRA\)](#) and [European Interoperability Cartography \(EIC\)](#).

<p><i>requirements, or needed cross-border or cross-sector interoperability initiatives? If yes, please indicate the EU initiative / policy and the nature of contribution.</i></p>	<p>interoperability that exists in the European market oversight domain, and implements secure data exchange and secure communications management for several cross-sector services.</p>
<p><i>Does the proposal fulfil an interoperability need for which no other alternative solution is available?</i></p>	<p><b>Yes.</b> ABCDE action implements services that fulfil user needs and support business process between administrations and businesses, where no satisfactory interoperable solution is available. Some samples of processes to be fulfilled with ABCDE interoperable solutions are:</p> <ul style="list-style-type: none"> <li>• State Aid Notification.</li> <li>• State Aid Expenditure Reporting.</li> <li>• State Aid Award Submission and Publication.</li> <li>• Antitrust Case Submission.</li> <li>• Coordination EC/MS in Antitrust enforcement and Merger control.</li> <li>• Leniency application.</li> <li>• Confidentiality negotiations.</li> <li>• Request for Information.</li> </ul>

### Cross-sector

Question	Answer
<p><i>Will the proposal, <b>once completed</b> be useful, from the interoperability point of view, and utilised in two (2) or more EU policy areas? If yes, which are those?</i></p>	<p><b>Yes.</b> All ABCDE common services will be supporting Competition policy, which is by definition a cross-sector policy and an instrument to guarantee well-functioning markets across different sectors of the economy such as Fisheries, Agriculture, Energy and Environment, Information, Communication and Media, Financial services, Basic Industries and Manufacturing, Pharma and Health services, Transport and Post among other sectors.</p> <p>Moreover, GENIS common services cover the needs of three DGs: MARE, AGRI and COMP.</p>
<p><i>For proposals or their parts <b>already in operational phase</b>: have they been utilised in two (2) or more EU policy areas? Which are they?</i></p>	<p><b>Yes.</b> What explained above applies in particular for all common services in Package I that are <b>already operational</b>: SANI2, State Aid Transparency Data Collection, State Aid Recovery Interest Calculator, State Aid Collaboration Platform Pilot, SARI, COMP eTrustEx and eQuestionnaire.</p>

## Cross-border

Question	Answer
<p><i>Will the proposal, <b>once completed</b> be useful, from the interoperability point of view, and used by public administrations of three (3) or more EU Members States?</i></p>	<p><b>Yes.</b> Additionally to the Package I solutions already operational, and in use by all Member States described below, the new solutions to be implemented under Package II, as eRFI or eLeniency, will be made available for economic operators from all Member States to download and re-use.</p> <p>eRFI will also be used to communicate with Member States in the context of State Aid sector inquiries and market investigations.</p>
<p><i>For proposals or their parts <b>already in operational phase</b>: have they been utilised by public administrations of three (3) or more EU Members States?</i></p>	<p><b>Yes.</b> Most of the ABCDE common services included in Package I are <b>already operational</b> and being used by public administrations of the 28 Member States and the European Commission. This is the case of the GENIS State Aid Common Services (SANI2, SARI, State Aid Transparency Data Collection, etc.) and ECN2.</p> <p>Additionally, GENIS building blocks are available in JoinUp for download and re-use by Member States.</p>

## Urgency

Question	Answer
<p><i>Is your action urgent? Is its implementation foreseen in an EU policy as priority, or in EU legislation?</i></p>	<p><b>Yes.</b> ABCDE as enabler of competition policy contributes to the implementation of several EU policy priorities as the Jobs, Growth and Investment agenda, the Digital Single Market and the Energy Union.</p> <p>ABCDE common services support the implementation of EU legislation such as:</p> <ul style="list-style-type: none"> <li>• Antitrust/Cartels investigations (Art. 101 and 102 of the TFEU),</li> <li>• Council Regulation (EC) No 139/2004 on control of concentrations between undertakings (the EC Merger Regulation),</li> <li>• EU State Aid rules (Art.107 to 109 of the TFEU).</li> <li>• State Aid Modernisation (SAM) and transparency requirements.</li> <li>• Directive 2014/104/EU on antitrust damages actions,</li> <li>• Leniency and immunity policy.</li> </ul>

<p><i>Does the ISA<sup>2</sup> scope and financial capacity better fit for the implementation of the proposal as opposed to other identified and currently available sources?</i></p>	<p><b>Yes.</b> No other sources of financing are available to finance this action as DG COMP doesn't have an operational budget line.</p> <p>Additionally, ABCDE action fits right into the ISA<sup>2</sup> scope, as ABCDE common services aim to facilitate exchanges between public administrations and between them and businesses and citizens. These exchanges are cross-sector and cross-border. Moreover, ABCDE common services are developed following the principles of re-usability and interoperability.</p>
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### Reusability of action outputs

<p>Name of reusable solution</p>	<p>State aid common services (developed under ISA Action 1.11 – GENIS):</p> <ul style="list-style-type: none"> <li>• SANI2</li> <li>• SARI (originally developed under IDABC)</li> <li>• State Aid Transparency Data Collection</li> <li>• State Aid Recovery Interest Calculator</li> <li>• State Aid Collaboration Platform</li> </ul>
<p>Description</p>	<p>These common services are used by the European Commission (DGs COMP, AGRI, and MARE) and the Member States' administrations to jointly implement State aid rules (Articles 107-109 TFEU) and the State Aid Modernisation.</p>
<p>References</p>	<p><a href="https://webgate.ec.europa.eu/competition/sani2">https://webgate.ec.europa.eu/competition/sani2</a>  <a href="https://webgate.ec.europa.eu/competition/sani/sari">https://webgate.ec.europa.eu/competition/sani/sari</a>  <a href="https://webgate.ec.europa.eu/competition/transparency">https://webgate.ec.europa.eu/competition/transparency</a>  <a href="https://webgate.ec.europa.eu/competition/aidcalculator">https://webgate.ec.europa.eu/competition/aidcalculator</a>  <a href="https://webgate.ec.europa.eu/fpfis/wikis/display/StateAid/Homepage">https://webgate.ec.europa.eu/fpfis/wikis/display/StateAid/Homepage</a></p>
<p>Target release date / Status</p>	<p>All State Aid common services are available in production and being used by the European Commission (DGs AGRI, MARE and COMP) and the Member States administrations.</p>
<p>Critical part of target user base</p>	
<p>For solutions already in operational phase - actual reuse level (as compared to the defined critical part)</p>	<p>SANI2: <b>3191</b> users.  SARI: <b>3092</b> users.  State Aid Transparency Data Collection: <b>73</b> users.  State Aid Collaboration Platform Pilot: <b>755</b> users.</p>
<p>Name of reusable solution</p>	<p>ECN2: common service developed under ISA Action 2.9 – DRS (ECN Pilot).</p>



Description	<p>ECN2<sup>12</sup> will be used by the European Competition Network (European Commission and the National Competition Authorities) to jointly implement Antitrust/Cartels rules (Articles 101-102 TFEU): inform each other about the status of Antitrust cases, share related documents and prepare inspections.</p> <p>ECN2 is also used by the EU Merger Working Group as an efficient and secure means to exchange documents in Merger cases.</p> <p>Finally, ECN2 is used as secure document sharing platform between European Commission and Member States' administrations to support the application of Antitrust/Cartel law by National Courts as well as the Directive 2014/104/EU on antitrust damages actions.</p>
Reference	URL will be made public when ECN2 enters in production.
Target release date / Status	It is planned to release ECN2 in production in September 2016.
Critical part of target user base	Target user base is 1500 users and 100 national administrations.

Name of reusable solution	<p>New ABCDE common services with a potential of re-use by Member States administrations:</p> <ul style="list-style-type: none"> <li>• eRFI</li> <li>• eLeniency</li> </ul>
Description	<p>Requests for information (incl. market investigations and sector inquiries) is a process equally applied by the European Commission and the National Competition Authorities in Competition law enforcement. Therefore there is a high potential of re-use of the eRFI common service. At least one National Competition Authority has expressed their intention to reuse the eRFI solution rather than developing their own solution.</p> <p>Immunity/leniency programmes are effective weapons in the fight against Cartels. They are implemented at European and National level. Therefore there is a high potential of re-use of the eLeniency common service.</p>
Reference	URLs will be made public when common services enter in production.
Target release date / Status	<ul style="list-style-type: none"> <li>• eRFI target date for production is Q2 2019.</li> <li>• eLeniency target date for production is Q4 2018.</li> </ul>
Critical part of target user base	To be defined during Initiating phases of the projects.

Name of reusable solution	<p>Building Blocks developed under ISA Action 1.11 – GENIS:</p> <ul style="list-style-type: none"> <li>• Multilingual</li> <li>• eForms</li> <li>• Reference Data</li> <li>• Audit Trail</li> </ul>
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<sup>12</sup> ECN2 will replace the ageing systems ECN-I and ECN-ET currently used by the European Commission and all Member States' National Competition Authorities.

Description	<ul style="list-style-type: none"> <li>• Multilingual: manages sets of translations in all European Commission languages in a central repository and offers these translations to different clients embedded in the user applications.</li> <li>• Reference Data: building block used for the management of reference data with special consideration for system performance and reusability.</li> <li>• eForms: generic forms easily defined and maintained.</li> <li>• Audit Trail: reusable building block to provide audit trail support of the operations carried out in the common services with a harmonised approach.</li> </ul> <p>These modules are completely decoupled as generic building blocks and are published for re-use.</p>
Reference	<a href="https://joinup.ec.europa.eu/asset/multilingual/home">https://joinup.ec.europa.eu/asset/multilingual/home</a> <a href="https://joinup.ec.europa.eu/asset/rd">https://joinup.ec.europa.eu/asset/rd</a> <a href="https://joinup.ec.europa.eu/asset/forms/home">https://joinup.ec.europa.eu/asset/forms/home</a>
Target release date / Status	Already in production and re-used by several common services.
Critical part of target user base	Not defined.
For solutions already in operational phase - actual reuse level (as compared to the defined critical part)	Since they were uploaded to JoinUp, GENIS building blocks accumulate a total of 241 downloads. GENIS Reference Data building block has a rating of 4 stars out of 5.

Name of reusable solution	Building Blocks developed under ISA Action 2.9 – DRS (ECN2 Pilot). <ul style="list-style-type: none"> <li>• Messaging</li> </ul>
Description	<ul style="list-style-type: none"> <li>• Messaging: implements communications between users via messaging operations (send message, reply, archiving and content encryption). This module could be decoupled as generic building blocks and published in JoinUp for re-use.</li> </ul>
Reference	Publication in JoinUp would follow.
Target release date / Status	Currently in acceptance, re-used by ECN2 (target release date in production is September 2016).
Critical part of target user base	Not defined.

Name of reusable solution	Document Repository Services <sup>13</sup>
Description	This building block provides full support to document management operations by implementing a full set of document management services that can be integrated with a client application. As mentioned, the service

<sup>13</sup> This re-usable component was developed by DG DIGIT in the context of ISA Action 2.9 Document Repository Services. Currently its maintenance is financed by ABCDE action, and the budget sub-delegated to DG DIGIT for its maintenance and evolution.

	is offered as a back-end solution in form of a Web Services layer.
Reference	<a href="https://joinup.ec.europa.eu/software/drs">https://joinup.ec.europa.eu/software/drs</a>
Target release date / Status	Already operational and available for download in JoinUP.
Critical part of target user base	12 downloads

### Level of reuse by the proposal

Question	Answer
Does the proposal intend to make use of any ISA <sup>2</sup> , ISA or other relevant interoperability solution(s)? Which ones?	<p><b>Yes.</b> Additionally to the interoperability solutions already re-used by ABCDE that are described below, ABCDE will identify candidate re-usable solutions to provide blocks of functionality in the implementation of new systems and the evolution of the existing.</p> <p>Some candidate building blocks that will be evaluated are:</p> <ul style="list-style-type: none"> <li>• eSSI (for e-signature),</li> <li>• eUI (for graphical user interface),</li> <li>• Activiti or Compass (for workflow),</li> <li>• Enterprise Search (for content search),</li> <li>• Corporate Notification Services (CNS) (for notifications).</li> </ul>
For proposals or their parts already in operational phase: has the action reused existing interoperability solutions? If yes, which ones?	<p><b>Yes.</b> ABCDE common services are already re-using existing solutions implemented by ISA<sup>2</sup> and ISA programs as e-TrustEx (ISA<sup>2</sup> 2016.19) and Document Repository Services (ISA 2.9). Additionally the different building blocks implemented under ISA Action 1.11 GENIS, are re-used inside ABCDE by other common services as State Aid Transparency Data Collection, State Aid Recovery Interest Calculator, ECN2, etc.</p> <p>ABCDE also re-uses other interoperable solutions developed by the European Commission as ECAS or Machine Translation.</p>

### Interlinked

Question	Answer
Does the proposal directly contribute to at least one of the Union's high political priorities such	<b>Yes.</b> Mobilising competition policy tools will be key to the success of the Jobs and Growth agenda, including priority policies such as the Digital Single Market (DSM), energy

<p>as the DSM? If yes, which ones? What is the level of contribution?</p>	<p>policy, financial services, industrial policy and the fight against tax evasion<sup>14</sup>.  The mission of ABCDE action is to contribute to a better functioning of competition policy and therefore of the internal market to the benefit of consumers, businesses and the European economy as a whole, while endorsing European Union's political priorities.</p>
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## PROBLEM STATEMENT

<b>Problems and needs addressed by Package I) Operation and improvement of existing common services</b>
<p>Problems:</p> <ul style="list-style-type: none"> <li>• IT solutions supporting EU legislation could be either implemented in each of the 28 Member States or with one common service used by all. The former would imply disparate expenditures by Member States multiplying IT solutions' developments and operations, as well as a number of disparate systems hardly interoperating with each other. The use of common services is the de-facto approach in the ABCDE context, being significantly more cost-efficient and more effective (interoperability, use/reuse and exchange of data).</li> <li>• Data exchanges –typically ruled by tight legal deadlines– are often carried out in an inefficient and time-consuming way (e.g. delivery of documents by e-mail or in (encrypted) DVDs or paper documents delivered by mail service).</li> <li>• Ongoing legislation changes requiring adaptations to underlying IT solutions.</li> </ul>
<p>Resulting needs:</p> <ul style="list-style-type: none"> <li>• Need to operate existing cross-sector interoperable common services used by the European Commission and the administrations of the 28 Member States to jointly implement EU legislation: SANI2, ECN2, SARI, State Aid Recovery Interest Calculator, State Aid Transparency Data Collection and the State Aid Collaboration Platform Pilot.</li> <li>• Need to operate existing cross-sector interoperable common services used by the EC, the administrations, the business and citizens to further support secured and efficient data exchanges required by EU legislation: eTrustEx and eQuestionnaire.</li> <li>• Need to improve/adapt, e.g. upon legislation change, existing cross-sector interoperable common services in the interest of the EU.</li> </ul>

<b>Problems and needs addressed by Package II) Development and operation of new ABCDE common services</b>
<p>Problems:</p> <ul style="list-style-type: none"> <li>• Recurrent and critical data exchange processes are currently carried out without IT support, being very resources-intensive. This is unbearable in the current situation of limited staff and resources in public administrations in the EU.</li> <li>• Data exchanges –often ruled by tight legal deadlines– are often carried out in an unsecured,</li> </ul>

<sup>14</sup> See President Jean-Claude Juncker's Mission Letter to Commissioner Margrethe Vestager, [https://ec.europa.eu/commission/.../commissioner\\_mission\\_letters/vestager\\_en.pdf](https://ec.europa.eu/commission/.../commissioner_mission_letters/vestager_en.pdf)

inefficient and time-consuming way (e.g. delivery of paper documents by mail service). Developing common services addressing this problem is in the benefit of the European Commission, the Member States administrations, the businesses and citizens.

- The European Commission and the Member States enforce, at different levels, similar legislation in the ABCDE context. IT solutions supporting similar data exchange processes at EU and national level could lead to disparate expenditures by Member States multiplying IT solutions' developments and operations.

Resulting needs:

- Need to provide state-of-the-art IT solutions to support recurrent and critical data exchange processes in a more effective and cost-efficient way: "do more with less". This is the case for eLeniency and eConfidentiality.
- Need to develop and operate new cross-sector interoperable common services used by the EC, the administrations in the Member States, the business and citizens to support secured and efficient data exchanges required by EU legislation: eLeniency, eConfidentiality and eRFI.
- Need to develop IT solutions supporting data exchanges for Case Management that are prone to reusability at European and national level. One National Competition Authority has already expressed his interest in reusing the eRFI solution, rather than developing their own solution. The European Competition Network could be used as a platform to present this solution to other National Competition Authorities.

#### **Problems and needs addressed by**

#### **Package III) Establishment of a common ABCDE architecture / framework**

Problems:

- Lacking a well-defined common architecture / framework would lead to different projects being implemented conform to ISA<sup>2</sup> each, however architecturally different. This would result in increasing costs over time, eventually resulting in the unsustainability of maintenance and operation of the ABCDE domain's common services.
- A distinct information security management by project (i.e. not having a global security strategy and implementation common for the ABCDE domain) would be not only expensive but would also imply a high risk of incoherence in the security implementation of interoperability, resulting inevitably in security vulnerabilities.
- Insufficient usage of standard exchange formats in the context of data exchanges in Case Management in the EU, resulting in reduced interoperability and higher costs for data exchanges.

Resulting needs:

- Need of a common ABCDE architecture / framework, aligned with EIRA and EIC, focusing on common SOA approach (business architecture, interoperability), common semantics, common specifications and standard exchange formats, common security implementation, aiming at maximising synergies and economies of scale and reducing operation, improvement, change and development costs.
- Need for a common, global information security management covering all data exchanges in Case Management.
- Need for identifying existing or defining new standard data exchange formats in the context of data exchanges in Case Management in the European Union.

## EXPECTED BENEFICIARIES AND ANTICIPATED BENEFITS

Beneficiaries	Anticipated benefits
European Union as a whole: Institutions, Member States, businesses and citizens	<p><b><u>Effective enforcement of EU competition law (Art. 101-109 TFEU)</u></b></p> <ul style="list-style-type: none"> <li>• State-of-the-art common e-services for efficient data exchanges in Case Management will result in a more effective enforcement of EU competition law by the European Commission and the Member States, leading to: <ul style="list-style-type: none"> <li>○ A better functioning of the European Single Market.</li> <li>○ Better services and products, more choices, and better prices for European consumers.</li> <li>○ More competitive European business better placed in the global economy.</li> </ul> </li> <li>• The quantified customer benefits resulting from antitrust (including cartels) and merger decisions in 2015 were estimated above €2.0 billion<sup>15</sup>. In 2015, the European Commission imposed €365 million in fines related to antitrust and cartel decisions, and imposed recoveries estimated on €1.8 billion of illegal State aid. Revenues from antitrust and cartel fines reduce the Member States' contributions to the EU budget.</li> <li>• At national level, the successful enforcement of Competition law brings similar benefits.</li> </ul>
European Commission, Member States and businesses	<p><b><u>Concrete cost savings derived from the common use (by the Commission and Member State administrations) of common ABCDE e-services</u></b></p> <ul style="list-style-type: none"> <li>• ABCDE common services are used by the European Commission and Member States' administrations to jointly implement EU legislation: SANI2, ECN2, SARI, State Aid Transparency Data Collection and the State Aid Collaboration Platform Pilot.</li> <li>• The provision and operation of central e-services jointly used by Member States and the European Commission translates in concrete cost savings, since Member States do not need to engage in significant investments to develop, operate and evolve their own information systems. <ul style="list-style-type: none"> <li>○ Example: with the implementation of the State Aid Transparency Data Collection, each Member State did not have to develop an information system on their own in order to comply with the Transparency provisions in State aid legislation that entered into force on 1<sup>st</sup> July 2016. A conservative estimation of €250.000 costs to develop such a system at national level result in savings of more than €6 million, to which operation, maintenance and evolution costs have not been counted.</li> <li>○ Similarly, the savings of providing and operating ECN2, a common service used by the European Competition Network (ECN) to jointly enforce Antitrust/Cartels rules can be estimated as high as €15 million<sup>16</sup>.</li> </ul> </li> <li>• The provision and operation of central e-services (versus many disparate systems) will also significantly reduce the implementation costs of interoperability and foster cross-sector and European-level interoperability.</li> </ul>
European Commission,	<p><b><u>Concrete cost savings derived from a common ABCDE architecture / framework</u></b></p> <ul style="list-style-type: none"> <li>• Implementing common functionality in re-usable components and following a coherent</li> </ul>

<sup>15</sup> [http://ec.europa.eu/atwork/synthesis/aar/doc/comp\\_aar\\_2015.pdf](http://ec.europa.eu/atwork/synthesis/aar/doc/comp_aar_2015.pdf)

<sup>16</sup> Based on 28 x €550.000 costs of development of ECN2 v1.0.

Member States	<p>architecture / framework common to all ABCDE common services shall significantly reduce development and operation costs. E.g. the savings on the State Aid Transparency Data Collection by re-using GENIS components can be estimated in at least €0.5 million<sup>17</sup>. This estimation can be extrapolated to future systems as eRFI, eLeniency and eConfidentiality.</p> <ul style="list-style-type: none"> <li>• The common ABCDE architecture / framework will foster cross-sector and European-level interoperability by establishing and spreading common domain semantics, specifications and standard exchange formats.</li> <li>• The common ABCDE architecture / framework could be potentially reused in any similar context (sector, policy area, national administration) dealing with a large set of complex data exchange processes with external stakeholders that have to interoperate with both backend systems and external systems.</li> </ul>
Member States	<p><b><u>Potential cost savings resulting from the re-use of ABCDE common services by Member States' administrations</u></b></p> <p>Similar exchange processes take place both at European and national level. Implementing e-services that can be re-used by Member States translates in potential cost savings. Some examples:</p> <ul style="list-style-type: none"> <li>• Requests for Information are carried-out both by the European Commission and the National Competition Authorities. The cost of implementation of eRFI as e-service supporting this process is estimated in €0.75 million (see section 1.1.12). Following high-level estimations, each potential re-use of this common service by a national administration could result in savings of approximately €1 million<sup>18</sup>;</li> <li>• Member States also implement leniency programs in Cartels investigations, making the eLeniency common service potentially re-usable. Following similar estimation calculations, each potential reuse of this common service by a national administration could result in savings of approximately €0.7 million<sup>19</sup>;</li> </ul>
European Commission, Member States and businesses	<p><b><u>Cost savings derived from automation of exchange processes</u></b></p> <ul style="list-style-type: none"> <li>• Several data and document exchange processes in Case Management (foremost the negotiation of confidentiality) still imply heavy manual intervention by European administrations and businesses' staff (e.g., case support and the Registries) as well as the use of costly postal services (e.g. DHL). Automating these processes will reduce the cost and manpower required to carry them. Concrete savings to be estimated.</li> <li>• Member State representatives for the European Competition Network come to Brussels several times a year (more than 20 in 2015) to participate in ECN Advisory Committees and sign the Advisory Committee Opinion document. The implementation of electronic signature in ECN2 would allow the Advisory Committee Opinion document to be signed remotely facilitating Advisory Committee meetings to be hold per videoconference. This would result in minimising delays in the procedure and will reduce travel and accommodation costs. Concrete savings to be estimated.</li> </ul>

<sup>17</sup> The cost of analysis and implementation of GENIS re-usable components (User Management, Reference Data, Multilingual, Forms and Audit Trail) was estimated in €1.1 Million in ISA Work Programme 2015 (approximately €220k per component). The savings link to reusing four of these components in State Aid Transparency Data Collection can be estimated in at least €0.5 million (220k per component multiplied by 4 minus integration costs).

<sup>18</sup> The implementation cost of eRFI is estimated in €0.6 million (see section 1.1.12). This amount doesn't include the cost of implementation of the different components that it will be reusing (estimating 4 components with an individual cost of €220k). Adding these amounts, the implementation of a similar system from scratch by a Member State could reach €1.48 million. If we estimate that tailoring eRFI for the Member State could cost 33% of the total amount (€0.49 million), the reusability of the solution for one Member State could mean almost €1 million savings.

<sup>19</sup> For eLeniency the cost of implementation €370k and estimating that the service will reuse 3 common components.

European Commission, Member States and businesses	<p><b><u>Efficiency gains derived from automation of exchange processes</u></b></p> <ul style="list-style-type: none"> <li>• eRFI will give respondents to market investigation the ability to delegate and collaborate in answering to the Requests for Information (e.g. involving different actors: legal department, departments, CEO, etc.) that will save companies and citizens valuable time, increasing response rates to European Commission's market investigations. European administrations make extensive use of Requests for Information (RFIs) every year. In 2015, only in DG COMP, 28.819 RFIs were sent out in the context of 100 competition cases.</li> <li>• eConfidentiality will make the confidentiality negotiation process (the most time consuming activity in the processes for parties' access to file and publication of final decisions) more resource-efficient and in a shorter delay by significantly speeding up the exchanges and facilitating the number of validation checks, allowing a faster registration, et cetera.</li> <li>• eLeniency will make the leniency request process more resource-efficient and in a shorter delay, by reducing administrative tasks and streamlining the process for external businesses. Taking into account that currently one Case Assistant handles almost 200 oral corporate statements each year, the automation of this process will significantly reduce the time needed for the administration to complete corporate statements and help decreasing the overall case duration freeing resources of the European Commission to carry out more Cartel and antitrust investigations.</li> </ul>
European Commission and businesses	<p><b><u>Enhanced security in the manipulation, transmission and storage of sensitive information.</u></b></p> <p>The European Commission has an obligation of professional secrecy to protect confidential data of the business that it receives in its investigations.</p> <ul style="list-style-type: none"> <li>• By substituting the usage of non-automated means (fax, mail post, etc.) inadvertent document disclosures will be minimised.</li> <li>• The common ABCDE architecture / framework will comprise a common, coherent information security management and technical implementation for all ABCDE common services. This will significantly improve the security of data exchanges in this domain.</li> </ul>
European Commission, Member States, businesses and citizens	<p><b><u>More transparency toward EU citizens</u></b></p> <ul style="list-style-type: none"> <li>• Consumers and companies in the EU will benefit from having more accessible and easily comparable information on support granted by national authorities to beneficiaries of State aid, thus increasing the awareness of the business and Member States on aid measures.</li> <li>• Improving collaboration between the European Commission and EU28 National Courts will allow a better overview of sectorial trends/focus on infringements cases at national level and increase transparency across the EU on competition cases both for business and for the administration.</li> </ul>

## EXPECTED MAJOR OUTPUTS

Output name	eConfidentiality
Description	The eConfidentiality project will automate and support the confidentiality negotiations process, allowing significant resource savings, reducing the time delays and improving the



	security of the process. The system will host and orchestrate the confidentiality negotiations in a secure workspace, linked to the case management application. The tool will also support the publication of decisions and access to documents.
Reference	Reference will be published after release in production.
Target release date / Status	Q4 2019.

## ORGANISATIONAL APPROACH

### Expected stakeholders and their representatives

Stakeholders	Representatives
<b>Package I) Operation and improvement of existing ABCDE common services</b>	
GENIS State aid common services (SANI2, State Aid Transparency Data Collection, State Aid Recovery Interest Calculator, SARI, State Aid Collaboration Platform Pilot)	
Project Owner (PO)	Gert-Jan Koopman (COMP Deputy DG for State Aids)
Business Manager (BM)	Nicola Pesaresi (HoU COMP.A.3), Koen Van de Castele (HoU COMP.0.3) Wolfgang Mederer (HoU COMP.H.4).
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Raül Romero Valls (COMP.R.3)
DG AGRI User Representatives	Ludmila Hamtcheva, Maria Elisabete Dias Costa, Linas Visomirskis (AGRI.DDG4.I2)
DG MARE User Representatives	Cécile Ducatez (MARE.F.4)
Member States User Representatives	Member State representatives attending the State Aid Working Group, chaired by COMP.0.3. and the Transparency Module Steering Group, chaired by COMP.A.3
<b>ECN2</b>	
Project Owner (PO)	Eddy de Smitjer (HoU COMP.A.4)
Business Manager (BM)	Petra Krenz (COMP.A.4)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Radu Tudose (COMP.R.3)
Member States User Representatives	Member State representatives attending the European Competition Network Plenary meetings, chaired by COMP.A.4
Other Stakeholders	DIGIT.B.2
<b>COMP eTrustEx</b>	
Project Owner (PO)	Sari Suurnakki (HoU COMP.R.1)
Business Manager (BM)	Vincent Maes (COMP.R.1)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Radu Tudose (COMP.R.3)

Other Stakeholders	DIGIT.B.2, DIGIT.B.4
eQuestionnaire	
Project Owner (PO)	Julia Brockhoff (DHoU COMP.A.2)
Business Manager (BM)	Christos Tsoumanis (COMP.A.2)
Solution Provider (SP)	Manuel Perez Espín (HoU COMP.R.3)
Project Manager (PM)	Sonia Tafaro (COMP.R.3)
<b>Package II) Development and operation of new ABCDE common services</b>	
eLeniency	
Project Owner (PO)	Eric Van Ginderachter (Director COMP.G)
Business Manager (BM)	Corinne Dussart-Lefret (COMP.G.5)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Thomas Luyckx (COMP.R.3)
eConfidentiality	
Project Owner (PO)	Kris Dekeyser (Director COMP.A)
Business Manager (BM)	Corinne Dussart-Lefret (COMP.G.5)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Thomas Luyckx (COMP.R.3)
eRFI	
Project Owner (PO)	Julia Brockhoff (DHoU COMP.A.2)
Business Manager (BM)	Christos Tsoumanis (COMP.A.2)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Sonia Tafaro (COMP.R.3)
Member States User Representatives	Member State representatives from the Merger Working Group (MWG).
<b>Package III) Establishment of a common ABCDE architecture / framework - CESA</b>	
Competition Enterprise and System Architecture (CESA)	
Project Owner (PO)	Manuel Pérez Espín (HoU COMP.R.3)
Business Manager (BM)	Daniel Julian Jiménez Krause (COMP.R.3) Javier Vázquez Fernández (COMP.R.3)
Solution Provider (SP)	Manuel Pérez Espín (HoU COMP.R.3)
Project Manager (PM)	Radu Tudose (COMP.R.3)
Other Stakeholders	DIGIT.B.1, DIGIT.B.6

## Communication plan

Services under the ISA<sup>2</sup> Action ABCDE will implement the communication management process following the PM2 methodology and will participate to the different ISA<sup>2</sup> communication channels, working groups and events as appropriate. Some of the meetings taking place will be:

- **Project follow-up and review meetings.** Chaired by the Project Manager and attended by the Business Manager and the Project Core Team, the project follow-up and review meetings aim to discuss the project progress, the identification of new risks and issues, the status of current and future deliverable and/or the testing progress among others. Depending of the project size they will be held on a monthly basis. The Project Progress Report shall support the meeting. Minutes of the meeting will be distributed by e-mail.

- **Project Steering Committee meetings.** Chaired by the Project Owner, and attended by the Business Manager, Solution Provider and Project Manager, the project steering committee meetings aim at discussing key points meriting management attention (e.g. problems encountered and actions taken, evaluation of the project status with respect to the scope, plan and budget). The frequency of the PSC will be defined by the Project Owner, depending on the nature and phase of the project. The Project Progress Report shall support the meeting. Minutes of the meeting will be distributed by e-mail.
- **DIT<sup>20</sup> meetings.** Chaired by a business Director and attended by project owners, business managers, IT and document management specialists. The DIT operates as DG COMP's IT Steering Committee and assures that the investments in IT are aligned with business needs and generate business value. The DIT coordinates the overall execution of the IT strategy and set priorities where necessary. DIT meetings are held monthly. Minutes of the meetings are distributed by e-mail.
- **Working groups and participatory meetings with Member States representatives.** For the common services used by the Member States' administrations, the European Commission holds several meetings per year to ensure the alignment of the common services with Member States' needs. IT trainings and Questions & Answers sessions are organised in this context. Some samples of these meetings are the ECN Plenary meeting, EU Merger Working Group or the Transparency Module Steering Group. Appropriate channels of communication will be established with those Member State administrations interested in the reuse of common services.
- **ABCDE – CASE@EC Coordination meetings** will bring together representatives from the ABCDE action and CASE@EC project, with the participation of DIGIT.B1 (Architecture Office). The purpose of these meetings will be to ensure architecture alignment and coherent SOA/interoperability approach between the two projects.
- **ABCDE - ISA<sup>2</sup> Coordination meetings** will bring together representatives from the ABCDE common architecture framework and ABCDE common services, with the participation of DIGIT.B6 (ISA Unit). The purpose of these meetings will be to ensure the alignment of the common ABCDE architecture framework with the European Interoperability Reference Architecture (EIRA).

## Governance approach

The governance of ISA<sup>2</sup> Action ABCDE will have two dimensions: global governance of the action as a whole and governance of each common service under the umbrella of ABCDE. The governance model will be aligned with the European Commission IT governance and will follow recommended standards and methodologies.

The ABCDE global governance will follow the ISA<sup>2</sup> governance structures and reporting to ensure ISA<sup>2</sup> alignment of the project. The ABCDE action will also be steered and monitored by the DIT (see section X.1.10.2), to ensure its business alignment.

The architecture alignment of ABCDE with the CASE@EC project and the European Interoperability Reference Architecture (EIRA) will be ensured by the Competition Enterprise and System Architecture sub-project (CESA) which will define the ABCDE common architecture/framework.

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<sup>20</sup> DIT stands for Document handling and IT systems Group.

Each ABCDE common service will implement a governance model based on PM2 methodology. The roles and responsibilities of the Project Owner and the Business Manager will be defined and each project will be steered by its Project Steering Committee (see table under section X.1.10.1). Each Project Steering Committees will bring together the different project stakeholders, and it will guide, promote, monitor and evaluate the successful execution of the project. The individual Project Steering Committees will report to the DIT.

## TECHNICAL APPROACH AND CURRENT STATUS

### **Package I) Operation and improvement of existing ABCDE common services.**

The common services under Package I will be in operation phase throughout the duration of ISA<sup>2</sup> programme. The operation phases will comprise the improvements of these common services. The improvements will have two lines:

- improvements derived from new business request and legislation changes,
- step-wise alignment with the ABCDE common architecture / framework.

**Current status:** all GENIS State Aid common services (SANI2, State Aid Transparency Data Collection, State Aid Recovery Interest Calculator, State Aid Collaboration Platform Pilot and SARI), COMP eTrustEx and eQuestionnaire are in production. ECN2 is planned to enter in production in September 2016.

### **Package II) Development and operation of new ABCDE common services.**

The common services under Package II will be implemented following PM2 and RUP@EC or Agile@EC methodologies<sup>21</sup>. The initiating and planning phases of the different sub-projects will go hand-in-hand with the implementation of the common ABCDE architecture proposed by CESA project. The executing phases will benefit from the common architecture by re-using common artefacts and technologies. In order to make the executing phases more efficient, the initiating and planning phases of new common services could cover not only the definition of the Business Case and the Project Charter, but also the specification of the System Business Requirements and/or the implementation of an architectural Proof of Concept (PoC) if required.

**Current status:** all sub-projects (eRFI, eLeniency, eConfidentiality) are currently in Initiating phase.

### **Package III) Establishment of a common ABCDE architecture / framework – Competition Enterprise and System Architecture (CESA) Project.**

The implementation of the common ABCDE architecture will take input from architectural analysis of the common services under Package I, and from the architectural analysis carried out during initiating and planning phases of the common services under Package II. Defining a common architecture in an holistic and coordinate approach will avoid the repeated efforts and costs derived from each common service carrying out their own analysis about the appropriate re-usability of components, will provide a common guideline to implement interoperability and provide sustainability for all ABCDE common services. The ABCDE common architecture will also coordinate the maintenance and evolution of the different common building blocks re-used by the common services (User Management, Reference Data, Multilingual, Audit Trail, etc.).

**Current status:** CESA project is currently in initiating phase.

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<sup>21</sup> PM2 is the project management/lifecycle methodology of the European Commission. RUP@EC and Agile@EC are software development methodologies of the European Commission.

## Services – Management, coordination, QA, testing, support and hosting

In order to gain efficiency and save costs, several non-development activities will be centralised as a horizontal service (see S.2) supporting all the ABCDE common services. This service will cover the implementation of quality assurance and quality control independently from the development teams, will provide 2<sup>nd</sup> level user support to administrations and business and will support all development teams for configuration and deployment management.

Following the same approach, Project Support Office (PSO) activities and Quality Management activities will also be centralised in an horizontal cell (see S.1) in order to give support to the different project managers, enforce coordination and harmonization among all the ABCDE common services, establish common standards on project management and software development methodologies aligned with PM2, RUP@EC and Agile@EC, draft qualitative reporting for the central governance and ISA<sup>2</sup> bodies, and ensure communication with the ISA<sup>2</sup> Working Group.

**Current status:** testing and support services are already operational and providing services to all sub-projects in Package I and II. Project Support Office and Quality Management activities are to be setup before the end of the 2016.

## COSTS AND MILESTONES

### Breakdown of anticipated costs and related milestones

Phase: Initiating Planning Executing Closing/Final evaluation	Description of milestones reached or to be reached	Anticipa ted Allocatio ns (KEUR)	Budget line ISA <sup>2</sup> / others (specify)	Start date (QX/YYYY)	End date (QX/YYYY)
Package I - Operation and improvement of existing ABCDE common services					
GEN-Operation	GENIS (State Aid common services)	3040	ISA <sup>2</sup>	Q2/2016	Q4/2020
ECN-Operation	ECN2	1435	ISA <sup>2</sup>	Q2/2016	Q4/2020
ETX-Operation	COMP eTrustEx	500	ISA <sup>2</sup>	Q2/2016	Q4/2020
EQU-Operation	eQuestionnaire	400	ISA <sup>2</sup>	Q2/2016	Q3/2020
Package II – Development and operation of new ABCDE common services					
ERF-Initiating	eRFI	100	ISA <sup>2</sup>	Q2/2016	Q4/2016
ERF-Planning	eRFI	60	ISA <sup>2</sup>	Q1/2017	Q2/2017
ERF-Executing	eRFI	740	ISA <sup>2</sup>	Q2/2017	Q4/2018
ERF-Closing	eRFI	130	ISA <sup>2</sup>	Q1/2019	Q2/2019
ERF-Operation	eRFI	390	ISA <sup>2</sup>	Q3/2019	Q4/2020
ELE-Initiating	eLeniency	50	ISA <sup>2</sup>	Q3/2016	Q4/2016
ELE-Planning	eLeniency	70	ISA <sup>2</sup>	Q4/2016	Q1/2017
ELE-Executing	eLeniency	300	ISA <sup>2</sup>	Q1/2017	Q2/2018

ELE-Closing	eLeniency	50	ISA <sup>2</sup>	Q3/2018	Q4/2018
ELE-Operation	eLeniency	100	ISA <sup>2</sup>	Q1/2019	Q4/2020
ECO-Initiating	eConfidentiality	70	ISA <sup>2</sup>	Q3/2016	Q4/2016
ECO-Planning	eConfidentiality	100	ISA <sup>2</sup>	Q4/2016	Q1/2017
ECO-Executing	eConfidentiality.	300	ISA <sup>2</sup>	Q2/2017	Q3/2018
ECO-Closing	eConfidentiality	100	ISA <sup>2</sup>	Q3/2018	Q4/2018
ECO-Operation	eConfidentiality.	200	ISA <sup>2</sup>	Q1/2019	Q4/2020
Package III – Establishment of a common ABCDE architecture / framework					
CES-Initiating	CESA	35	ISA <sup>2</sup>	Q2/2016	Q3/2016
CES-Planning	CESA	70	ISA <sup>2</sup>	Q3/2016	Q4/2016
CES-Executing	CESA	350	ISA <sup>2</sup>	Q1/2016	Q2/2018
CES-Closing	CESA	60	ISA <sup>2</sup>	Q3/2018	Q4/2018
CES-Operation	CESA	1775	ISA <sup>2</sup>	Q2/2016	Q4/2020
DRS-Operation	DRS operation	600	ISA <sup>2</sup>	Q2/2016	Q4/2020
Services – Management, coordination, QA, testing, support and hosting for ISA <sup>2</sup> Action ABCDE					
PMO-Operation	Overall project management and support, PMO, ISA <sup>2</sup> reporting, communication	870	ISA <sup>2</sup>	Q2/2016	Q4/2020
SUP-Operation	User support, QA, testing pool, etc.	1559	ISA <sup>2</sup>	Q2/2016	Q4/2020
HOS-Operation	Hosting DIGIT Data Center	920	ISA <sup>2</sup>	Q2/2016	Q4/2020
	<b>TOTAL</b>	14374	ISA <sup>2</sup>		

### Breakdown of ISA<sup>2</sup> funding per budget year

Budget Year	Budget allocation
2016	2335
2017	3019
2018	3320
2019	2920
2020	2780
<b>Grand Total</b>	<b>14374</b>

Budget Year	Phase	Anticipated allocations (in KEUR)	Executed budget (in KEUR)
2016	GEN-Operation	480	
2016	ECN-Operation	255	
2016	ETX-Operation	100	
2016	EQU-Operation	80	
2016	ERF-Initiating	100	

2016	ELE-Initiating	50	
2016	ELE-Planning	70	
2016	ECO-Initiating	70	
2016	ECO-Planning	50	
2016	CES-Initiating	35	
2016	CES-Planning	70	
2016	CES-Executing	80	
2016	CES-Operation	225	
2016	DRS-Operation	120	
2016	PMO-Operation	110	
2016	SUP-Operation	240	
2016	HOS-Operation	200	
2017	GEN-Operation	640	
2017	ECN-Operation	300	
2017	ETX-Operation	100	
2017	EQU-Operation	80	
2017	ERF-Planning	60	
2017	ERF-Executing	340	
2017	ELE-Executing	250	
2017	ECO-Planning	50	
2017	ECO-Executing	200	
2017	CES-Executing	220	
2017	CES-Operation	230	
2017	DRS-Operation	120	
2017	PMO-Operation	100	
2017	SUP-Operation	209	
2017	HOS-Operation	120	
2018	GEN-Operation	640	
2018	ECN-Operation	340	
2018	ETX-Operation	100	
2018	EQU-Operation	80	
2018	ERF-Executing	400	
2018	ELE-Executing	50	
2018	ELE-Closing	50	
2018	ECO-Executing	100	
2018	ECO-Closing	100	
2018	CES-Executing	50	
2018	CES-Closing	60	
2018	CES-Operation	440	
2018	DRS-Operation	120	
2018	PMO-Operation	220	
2018	SUP-Operation	370	
2018	HOS-Operation	200	
2019	GEN-Operation	640	

2019	ECN-Operation	340	
2019	ETX-Operation	100	
2019	EQU-Operation	80	
2019	ERF-Closing	130	
2019	ERF-Operation	130	
2019	ELE-Operation	50	
2019	ECO-Operation	100	
2019	CES-Operation	440	
2019	DRS-Operation	120	
2019	PMO-Operation	220	
2019	SUP-Operation	370	
2019	HOS-Operation	200	
2020	GEN-Operation	640	
2020	ECN-Operation	200	
2020	ETX-Operation	100	
2020	EQU-Operation	80	
2020	ERF-Operation	260	
2020	ELE-Operation	50	
2020	ECO-Operation	100	
2020	CES-Operation	440	
2020	DRS-Operation	120	
2020	PMO-Operation	220	
2020	SUP-Operation	370	
2020	HOS-Operation	200	
	TOTAL	14374	