e-Government actions targeting businesses

Commission’s actions implemented, but availability of e-services still varies across the EU
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Executive summary

Since the 1990s, e-Government has been promoted at EU level. E-Government refers to the use of information and communication technologies to deliver government services to citizens and businesses more effectively and more efficiently. It aims to reduce administrative burdens on citizens and businesses by making their interactions with public authorities faster, more convenient and cost-efficient, thereby stimulating competitiveness and economic growth.

In 2016, the Commission adopted the EU e-Government Action Plan for 2016-2020. The Action Plan was intended to serve as a catalyst to coordinate public-sector modernisation efforts and resources in the field of e-Government. It included 25 actions to be implemented by the Commission. The Action Plan did not have a dedicated budget but was supported through different programmes and accompanying measures available to Member States.

Given the increasing importance of digital services, as the COVID-19 pandemic demonstrated, and substantial funding for digitalisation in general, we decided to carry out this audit to inform policymakers about issues affecting the design and implementation of EU measures promoting e-Government.

We assessed whether the Commission’s e-Government actions were effective. To this end, we examined the actions’ overall design as well as the arrangements for monitoring and implementation. We focused our assessment regarding implementation on actions targeting businesses, because e-Government is important for addressing regulatory fragmentation and barriers, and thus allow businesses to scale up and operate across borders.

We concluded that the Commission’s actions have been only partially effective at fostering both the implementation and the take-up of e-Government solutions by Member States. The Commission completed the actions of the 2016-2020 e-Government Action Plan covered by our audit. However, not all newly-developed digital public services are available across the EU due to delays in the implementation at the level of the Member States.
VI Although the 2016-2020 e-Government Action Plan met the needs identified in consultations and assessments, it only included actions to be implemented by the Commission itself, thus making it difficult to live up to the Action Plan’s vision of having open, efficient and inclusive public administrations and public institutions in the EU by 2020.

VII Moreover, the Commission did not comprehensively monitor the implementation of the Action Plan as a whole. Existing e-Government indicators (the e-Government Benchmark and the Digital Economy and Society Index) were not directly linked to any of the actions implemented under the Action Plan, and so were not suited to measuring its overall impact. We note that the Commission’s 2021 proposal for the “Path to the Digital Decade” policy programme introduced a co-operation framework that makes it possible to follow up Member States’ progress towards the digital targets set at EU level.

VIII The Commission supported the implementation of e-Government solutions by Member States through EU financed projects and by providing technical support. In addition, the Commission actively supported collaboration and exchanges of good practice in many ways, including through expert groups and platforms. This support was appreciated by the Member States we visited.

IX There was no overarching strategy to promote the e-Government solutions available at EU level among key users. The Commission’s promotion of e-Government solutions was limited, and it had no overview of actions undertaken in this respect by Member States even though coordinated efforts may have led to better results.

X The Commission did not assess businesses’ awareness of available e-Government services and did not generally analyse the needs in this area, even though this is a key step in the take-up of e-Government services. The only exception was a study and a knowledge and learning programme among small and medium-sized enterprises in the area of the electronic identification and trust services market.

XI We recommend that the Commission should:

- strengthen the implementation framework to urge Member States to complete e-Government services; and
- develop a comprehensive strategy for promoting e-Government services effectively.
Introduction

Importance of e-Government in the EU

01 E-Government refers to the use of information and communication technologies (ICTs) to deliver government services to citizens and businesses more effectively and efficiently. It is expected to increase effectiveness and efficiency by reducing (i) costs and transaction times\(^1\); (ii) administrative silos of information; and (iii) the administrative burden on citizens and businesses by making their interactions with public authorities faster, more convenient and less costly, thereby spurring competitiveness and economic growth\(^2\).

02 In the 1990s, the first e-Government initiatives were taken at European level. Since then:

- the Commission has issued Communications and Action Plans\(^3\) at regular intervals and set up specific funding programmes, in particular to foster the use of ICTs to ensure cross-border services (in other words, to ensure interoperability between various services);

- at Member State level, the importance of e-Government has been highlighted in several ministerial declarations\(^4\). These declarations have also included numerous actions to which the Member States were committing, but also called on the Commission to take a number of actions via Action Plans and suggested that the Commission should organise joint governance of e-Government Action Plans (for a complete overview of the developments in the EU since 2006 see Annex I).

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1 United Nations E-government Knowledgebase.


4 Recent examples: 2017 Tallinn Ministerial Declaration on e-Government; 2020 Berlin Declaration on Digital Society and Value-Based Digital Government.
In 2016, as part of the Digital Single Market for Europe Strategy, the Commission adopted the EU e-Government Action Plan for the 2016-2020 period. It identified 25 actions, five of which were added after the mid term review of the Digital Single Market Strategy in May 2017. The Action plan included actions that were very different in nature. Some were specifically targeting businesses (e.g. “Present an initiative to facilitate the use of digital solutions throughout a company's lifecycle” or “Launch a pilot on the “once-only” principle for businesses”). Others were of interest to all citizens (e.g. “Assessing the possibility of applying the once-only principle for citizens in a cross-border context” or “Enforcement of EU agri-food legislation on Internet sales and consumer information”). For a complete list of actions, see Annex II.

The Action Plan was not followed by a new Action Plan after 2020 but by several other initiatives, the most relevant of which are:

- the Digital Europe Programme\(^5\) approved by legislators with a planned overall budget of €7.5 billion (at current prices). It focuses on bringing digital technology to businesses, citizens and public administrations and will provide funding for projects in five areas (supercomputing, artificial intelligence, cybersecurity, advanced digital skills, and ensuring a wide use of digital technologies across the economy and society);

- a Communication issued by the Commission on “2030 Digital Compass: the European way for the digital decade”. Linked to this, the Commission made a proposal for a Decision of the European Parliament and of the Council establishing the 2030 policy programme “Path to the Digital Decade”. Both documents set out the specific digital targets, which the EU as a whole is expected to achieve by the end of the decade. The targets for the digitalisation of public services include: online access to key public services, access to medical records, and use of digital identification (ID) solution.

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Organisation for Economic Co-operation and Development data\(^6\) showed that e-Government services are of greater relevance for businesses than for individuals. Businesses are held back by regulatory fragmentation and barriers, making it more difficult for them to scale-up and operate across borders within the EU Single Market\(^7\).

The impact of the COVID-19 pandemic on the global economy and on citizens’ lives has highlighted the importance of digital services across all areas of the EU economy and society. New technologies kept businesses and public services functioning and ensured that trade across the EU has continued to flow freely. They have also helped to keep citizens connected with one another, to work remotely, and to support the continued education of young people.

**Roles and responsibilities**

As the relevant ministers highlighted in their 2017 Declaration, the digital transformation of public administration is a collective endeavour at European as well as national, regional and local level, taking into consideration the respective division of competences\(^8\). According to the subsidiarity principle, responsibility for the digitalisation of governmental services at the national and regional levels essentially lies with the Member States. However, the Commission is responsible for cross-border and transnational challenges, in particular avoiding the build-up of electronic barriers that may prevent public administrations from connecting with each other, and citizens and businesses from finding and using available digital public services in countries other than their own\(^9\).

Progress on e-Government in the EU therefore depends not only on the Commission but also on the political will and ambition of the Member States. As the Commission highlighted in its State-of-play report on digital public administration and interoperability in 2020, unless governments continuously consider e-Government as a core priority in the political agenda, efforts will be futile and unsustainable.

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\(^8\) 2017 Tallinn Ministerial Declaration on e-Government.

\(^9\) Introduction to the National Interoperability Framework Observatory.
At EU level, the Commission’s Directorate-General for Communications Networks, Content and Technology (DG CONNECT) is responsible for coordinating the e-Government policy area. Given the variety of the 25 actions concerned by the 2016-2020 Action Plan, as many as 11 Directorates General were involved, each of which was responsible for one or more actions (see Annex II).

Similarly, at Member State level, various public administrations are responsible for implementing specific e-Government solutions. These include not only central ministries or agencies, but also regional and local authorities, such as municipalities or regional governments.

To coordinate the Action Plan, an “e-Government Action Plan Steering Board” was put in place. It was chaired by the Commission and comprised the Member State representatives responsible for their national e-Government strategies.

Financing the implementation of e-Government

The 2016-2020 Action Plan did not have a dedicated budget. E-Government actions in general are however supported through different sources of EU funding. Table 1 provides details of the main sources of EU funding (for the 2014-2020 period) and our estimates of the budgetary allocations to e-Government projects and actions.
Table 1 – Estimated budgetary allocations to e-Government actions across different programmes over the 2014-2020 period

<table>
<thead>
<tr>
<th>Programme</th>
<th>Amount (million €)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central management by the Commission</strong></td>
<td></td>
</tr>
<tr>
<td>Connecting Europe Facility (CEF) Telecom</td>
<td>704</td>
</tr>
<tr>
<td>Funds among other things the development and implementation of EU-wide data and digital service infrastructures to support their introduction in key areas of public interest, e.g. the e-Justice portal or the Business Registers Interconnection System.</td>
<td></td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>192</td>
</tr>
<tr>
<td>Funds among other things innovative solutions for public administrations and for creating a modern, ICT-enabled public sector.</td>
<td></td>
</tr>
<tr>
<td>Interoperability solutions for European public administrations, businesses and citizens (ISA²)</td>
<td>131</td>
</tr>
<tr>
<td>Funds interoperability solutions, including digital solutions for interoperable cross-border and cross-sector public services, as well as for exchanging good practices and promoting e-Government solutions.</td>
<td></td>
</tr>
<tr>
<td>Structural Reform Support Programme</td>
<td>61</td>
</tr>
<tr>
<td>Funds technical assistance projects that help Member States to implement growth that enhances institutional, structural and administrative reforms, including enhanced digitalisation.</td>
<td></td>
</tr>
<tr>
<td><strong>Shared management (Commission and Member States)</strong></td>
<td></td>
</tr>
<tr>
<td>Funds implementing cohesion policy (European Structural and Investment Funds)</td>
<td>3 940</td>
</tr>
<tr>
<td>Can co-finance projects to digitalise the public sector (national and local level), small and medium-sized enterprises, and broadband rollout.</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Estimates are based on the amount dedicated to Digital Service Infrastructures (for CEF); information provided by the Commission (for Horizon 2020 and the Structural Reform and Support Programme); the amounts allocated to “e-Government services and applications” (for European Structural and Investment Funds).

**Source:** ECA based on information provided by the Commission.

13 In the 2021-2027 period various sources of EU funding will be available to support digitalisation in general and e-Government actions in particular. The budgetary allocations for some of them still need to be determined:

- both the Connecting Europe Facility (CEF) and the funds implementing cohesion policy will remain available;
under one strand of the new Digital Europe Programme (see paragraph 04), support is planned (with a budget of €1.1 billion), among other things, for interoperability and to enable public administrations to deploy and access state-of-the-art digital technologies;

the Recovery and Resilience Facility adopted in 2021 requires Member States to allocate at least 20 % of the total budget of their recovery and resilience plans to measures that contribute to digital objectives. In July 2022, 25 such plans had been adopted and the total expenditure relating to the digital objectives amounts to €127 billion, representing 26 % of the total. More than a third (36 %, €46 billion) is allocated to the digitalisation of public services, including the digitalisation of transport.
Audit scope and approach

Given the relevance of e-Government for public bodies, businesses and citizens, our aim was to inform policymakers by shedding light on the design of the EU measures fostering e-Government and to highlight impediments to their successful implementation.

Considering the increasing importance of digital services, as evidenced by the COVID-19 pandemic, and the significant funding being allocated to digitalisation in general (see paragraphs 12-13), we decided to carry out this audit of the 2016-2020 Action Plan. Moreover, we have not audited any of the previous digital Commission initiatives implemented since 2001 (see paragraph 02 and Annex I), with the exception of EU actions in the specific field of cross-border healthcare.

We asked whether the Commission’s e-Government actions were effective. To answer this question, we assessed whether:

(a) the Commission designed its e-Government actions appropriately;
(b) the Commission monitored the implementation of the 2016-2020 e-Government Action Plan appropriately;
(c) the e-Government actions targeting businesses achieved their purpose; and
(d) the Commission promoted the exchange of good practices and the newly established digital public services appropriately.

The period covered by this audit was the one during which the 2016-2020 Action Plan was designed and implemented. We also looked at the design of post-2020 actions (see paragraph 04) where relevant, in order to verify whether weaknesses have been addressed and lessons learnt from the 2016-2020 Action Plan have been taken into account.

For the reasons stated in paragraph 05, we focused our audit to answer sub-questions (c) and (d) (see paragraph 16) on six of the 25 actions in the 2016-2020 Action Plan that were directly related to businesses (see Table 2).

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10 Special report 07/2019 “EU actions for cross-border healthcare: significant ambitions but improved management required.” looked at the implementation of a Directive covering a very specific sector: cross-border healthcare.
Table 2 – Actions targeting businesses included in the scope of the audit

<table>
<thead>
<tr>
<th>No</th>
<th>Action</th>
<th>Legal base already in place when the Action Plan was adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Accelerate the take-up of electronic Identification, Authentication and Trust Services (eIDAS services), including eID and eSignature</td>
<td>Regulation 910/2014</td>
</tr>
<tr>
<td>7</td>
<td>Submit a proposal for a <strong>Single Digital Gateway</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i.e. a single point of access to information, procedures and assistance services online)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Set up, in cooperation with the Member States, the mandatory interconnection of all Member States’ business registers</td>
<td>Directive 2012/17</td>
</tr>
<tr>
<td>10</td>
<td>Further develop the electronic interconnection of insolvency registers</td>
<td>Regulation 2015/848</td>
</tr>
<tr>
<td>11</td>
<td>Present an initiative to facilitate the use of digital solutions throughout a company’s lifecycle</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Launch a pilot on the “once only” principle for business.</td>
<td></td>
</tr>
</tbody>
</table>

*Source: ECA.*

19 We examined evidence from a range of sources:

- a desk review of relevant documents from the Commission, as well as questionnaires completed by and interviews held with Commission staff;

- analysis of relevant documents regarding a sample of four Member States (Denmark, Germany, Poland and Romania) as well as questionnaires completed by and interviews with staff from relevant public services in these countries. The selection of Member States was based on the progress in e-Government of the respective Member State while ensuring that the sample included Member States joining the EU before as well as after 2004;

- analysis of a sample of 24 centrally managed EU funded projects: 13 CEF projects, eight ISA² actions and three Horizon 2020 projects. A complete list of selected projects is included in *Annex III*. We selected these projects based on their state of implementation, materiality, and geographical spread (as far as possible connected to the four selected Member States);
- interviews with relevant stakeholders, i.e. organisations representing European small and medium-sized enterprises (SMEs)\textsuperscript{11};

- a review of academic literature, expert studies and international benchmarks or good practices.

\textsuperscript{11} Business Europe, EuroChambres – the Association of European Chambers of Commerce and Industry, European Digital SME Alliance, SMEunited.
Observations

The design of e-Government actions improved over time

20 Action Plans aim to contribute to the design or revision of existing EU legislation, instruments and initiatives. They are not legally binding. The Commission used e-Government Action Plans as political instruments to advance the modernisation of public administrations across the European Union.

21 The Commission should design actions, which are suitable for overcoming e-Government shortcomings and take account of results from evaluations, stakeholders’ views via consultations, and impact assessments (compulsory for all new financial interventions, which entail significant expenditure, i.e. in excess of €5 million and required for Commission initiatives that are likely to have significant economic, environmental or social impacts)\(^\text{12}\).

22 We therefore assessed whether the Commission appropriately designed:

- the 2016-2020 Action Plan; and

\(^\text{12}\) Better Regulation Guidelines.
The actions included in the 2016-2020 e-Government Action Plan did not live up to its vision

23 The Action Plan was built around a vision and three policy priorities (see Box 1).

Box 1

Vision and policy priorities of the Action Plan

**Vision:** By 2020, public administrations and public institutions in the European Union should be open, efficient and inclusive, providing borderless, personalised, user-friendly, end-to-end digital public services to all citizens and businesses in the EU. Innovative approaches are used to design and deliver better services in line with the needs and demands of citizens and businesses. Public administrations use the opportunities offered by the new digital environment to facilitate their interactions with stakeholders and with each other.

**Policy priorities:**

- To modernise public administration with ICT, using key enablers;
- To enable cross-border mobility with interoperable digital public services;
- To facilitate digital interaction between administrations and citizens/businesses for high-quality public services.


24 In order to address the priorities and ultimately achieve the vision of an open, efficient and user-friendly public administration in the EU, the Action Plan identified 25 actions, each of them linked to one of the priorities. The actions were of different nature and included amongst others the submission of legal acts, the development of technical solutions or support to Member States (see Annex II for all actions). We conclude that they reflected the needs identified in relevant evaluations as well as the feedback from the Member States’ administrations, businesses’, citizens’ and stakeholders’ representatives. Examples of some of the needs and the related actions are presented in Box 2.
Examples of stakeholders’ needs and their reflection in the 2016-2020 Action Plan

The need to:

- develop solutions for paperless exchanges of information between different administrations was addressed by actions 6, 14, 15, 16, 17, 21 and 22 of the Action Plan;
- ensure that information to a public administration only needs to be provided once (“once only” principle) was addressed by actions 6, 13 and 18;
- have interoperable national systems to ensure cross-border services was addressed by actions 4 and 6;
- further support transition to eProcurement was addressed by actions 1, 5 and 6.

For the complete list of actions see Annex II.

Source: ECA.

In spite of the fact that the evaluation report of the 2011-2015 e-Government Action Plan identified the voluntary nature of Member States’ activities as the main reason for outstanding or incomplete actions, all actions in the 2016-2020 Action Plan were aimed at the Commission only, without any obligation for Member States.

However, for most of the actions such obligations were included in the relevant legal acts either already existing before the Action Plan (e.g. actions 9 and 10; see Table 2) or introduced as a result of the Action Plan (e.g. action 7). For one action (action 2) the existing legal base did not place any obligations on Member States to implement an eID scheme in spite of the fact that secure eID means are an essential element for ensuring a digital single market.

As the actions in the Action Plan only aimed at the Commission, the deadlines for implementing them did not take into account the time needed for the Member States to fulfil their obligations resulting from relevant legal acts. In some cases, the implementation deadlines set in the legal acts extended beyond the duration of the Action Plan and its vision date of 2020 (see examples in Box 3). Moreover, as the vision

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**Box 2**

**Examples of stakeholders' needs and their reflection in the 2016-2020 Action Plan**

The need to:

- develop solutions for paperless exchanges of information between different administrations was addressed by actions 6, 14, 15, 16, 17, 21 and 22 of the Action Plan;
- ensure that information to a public administration only needs to be provided once (“once only” principle) was addressed by actions 6, 13 and 18;
- have interoperable national systems to ensure cross-border services was addressed by actions 4 and 6;
- further support transition to eProcurement was addressed by actions 1, 5 and 6.

For the complete list of actions see Annex II.

Source: ECA.

of an open, efficient and user-friendly public administration in the EU encompassed all public services at all governmental levels (from EU to national to local level) it would have only been achievable through the timely implementation of relevant actions at EU as well as Member States’ level.

**Box 3**

**Commission legislative actions requiring Member State action**

**Action 11** (use of digital solutions throughout a company’s lifecycle): Member States had until August 2021 to transpose the *Directive 2019/1151* with the possibility of extending the deadline by one year to August 2022.


**The Commission’s proposed post-2020 policy addresses the shortcomings, but has not yet been adopted**

**28** When designing the post-2020 e-Government policy documents (see paragraph 04), the Commission based itself on the documents required by the Better Regulation Guidelines and took due account of the needs that had been identified. However, as the proposal for the “Path to the Digital Decade” policy programme is still going through the legislative process (as of September 2022) and so may be amended, it remains to be seen whether the scope and prioritisation of the targets of the Decision that is ultimately adopted will correspond to actual needs.

**29** Although the proposed “Path to the Digital Decade” does not include specific actions for Member States, each Member State will have to submit to the Commission a national Digital Decade strategic roadmap, which shall be consistent with, and contribute to achieving the EU objectives and digital targets set (see *Box 4*).
Box 4

Targets to be achieved for digitalising public services

The targets in the proposal for the digitalisation of public services in the “Path to the Digital Decade”:

- 100 % online accessible provision of key public services for Union citizens and businesses;
- 100 % of Union citizens have access to their medical records;
- at least 80 % of Union citizens use a digital identification (ID) solution.


30 With regard to the three targets defined in the “Path to the Digital Decade” we note the following:

- **Target (1)** refers to “key public services” but these were defined neither in the 2030 Digital Compass Communication nor in the proposal for the “Path to the Digital Decade”. The lack of a common definition at EU level can result in different interpretations by Member States and hence in different national public services being accessible online.

- **Target (3)** refers to citizens’ use but because citizens cannot be forced to use eID solutions, achieving this target is beyond the control of any public administration.

31 We also note that the Commission’s proposal introduced a co-operation framework with the Member States. In line with the framework, Member States will be required to align the national roadmaps to the EU objectives and digital targets and to report to the Commission on their progress in achieving the 2030 digital targets in due time. Hence, the framework provides a basis for the Commission to steer the implementation of the policy and assess the progress made.
Monitoring arrangements for the 2016-2020 Action Plan were incomplete

32 Monitoring is necessary to allow policy makers and stakeholders to evaluate whether policy implementation is ‘on track’ and objectives are being achieved\textsuperscript{14}. To that end, the Commission should\textsuperscript{15} establish, among other things, a clear link between policy objectives and proper key indicators that take account of the arrangements needed to collect sufficient evidence in time.

33 We therefore assessed whether the Commission had:

- appropriately monitored the implementation of the Action Plan;
- set up an appropriate system for monitoring whether the digital targets set in the 2030 Digital Compass had been achieved.

There was no comprehensive assessment of the Action Plan

34 Neither the vision nor the policy priorities of the 2016-2020 e-Government Action Plan (see \textit{Box 1}) were specific enough to allow measuring their achievement. Therefore, the Commission did not set up any specific monitoring framework including a set of performance indicators to assess the progress of the actions and policy priorities and the extent to which they were met. Similarly, the Commission did not prepare either a mid-term or a final evaluation of the implementation of the Action Plan.

35 We found that the Commission focused simply on monitoring progress towards the completion of the individual actions. It did not monitor their impact. The \textit{e-Government Action Plan Dashboard} tracked only whether any action was completed or in progress.

36 In addition, the Commission discussed progress with the Member States in the meetings of the Steering Board (see paragraph \textit{11}) and its relevant sub-groups. For individual actions, such exchanges also took place during regular meetings of relevant expert groups, such as the eIDAS Expert Group, the Single Digital Gateway Co-ordination Group, and the CEF Expert Group.

\textsuperscript{14} Commission’s Better Regulation Toolbox.

\textsuperscript{15} Commission’s Better Regulation Guidelines.
However, the Commission did not request any systematic feedback from Member States to follow up the implementation of specific actions at national level.

Nevertheless, for some actions included in the Action Plan (action 1 – eProcurement, action 2 – eIDAS, action 4 – European Interoperability Framework, and action 7 – Single Digital Gateway), the relevant Commission departments set up specific monitoring arrangements. Box 5 provides an example.

### Box 5

**Specific monitoring arrangements for the European Interoperability Framework**

The implementation of the European Interoperability Framework (action 4), is monitored through the National Interoperability Framework Observatory on the basis of more than 70 key policy indicators (e.g. existence of single points of contacts in the areas of information relevant for citizens and businesses or internet use for interaction with public authorities). The results are displayed in a series of data scoreboards and dashboards and feed into the annual state-of-play report on digital public administration and interoperability.

*Source:* ECA.

Instead of a specific monitoring framework, the Commission used its existing indicators, in particular the e-Government Benchmark and Digital Economy and Society Index (DESI) for monitoring (see Box 6).
Box 6

e-Government indicators

Each year since 2001, the Commission has published the e-Government Benchmark Report providing insight into the use of ICTs in the public sector. Countries are benchmarked against the availability and characteristics of digital public services. It assesses the overall e-Government performance of Member States, on a scale from 0 % to 100 %.

Each year since 2015, the Commission has also published yearly the Digital Economy and Society Index (DESI), showing progress on e-Government across Member States. It is a composite index, which monitors Europe’s overall digital performance and tracks the evolution of EU Member States in digital competitiveness. DESI started with five dimensions, later reduced to four, including digital public services (e-Government). It monitors the demand for and supply of e-Government services as well as open data policies and implementation.

Source: ECA.

40 The e-Government Benchmark took into account the high-level policy priorities of the 2011-2015 Action Plan and the 2016-2020 Action Plan (see Box 1). However, its main objective is to analyse the state of play of digital services provided by Europe’s public administrations in general rather than monitoring the implementation and achievement of the Action Plans. The indicators used under the e-Government Benchmark are not directly linked to any of the actions implemented under the Action Plan, and thus the e-Government Benchmark reports are not suited to measure their achievement.

41 The same is true for DESI, where three out of five indicators that make up the DESI dimension of digital public services, are actually e-Government Benchmark indicators. As a result, the Commission is unable to link the results of either indicator to the results and impact of the Action Plan in the Member States.

42 We compared the overall e-Government Benchmark score per country at the beginning and end of the implementation of the Action Plan. We found that the average score (all 27 Member States, EU-27) increased from 58.5 % at the beginning to 71.9 % at the end of the implementation of the Action Plan. All Member States advanced in the delivery of e-Government services. However, some countries advanced significantly more (e.g. Hungary and Luxembourg) than others (e.g. Sweden and Germany) (see Figure 1). The change in the score cannot be linked to the
Commission’s actions, due to the lack of appropriate indicators linked to these actions. The key actions and levers in this respect depend on the Member States themselves (see paragraph 08).

Figure 1 – Overall e-Government Benchmark score per country, 2017 versus 2020

(Countries ordered by descending 2017 score)

We also note that, as the Commission changed the methodology used to compile a subset of indicators in 2021, the Benchmark cannot be used to compare progress of e-Government performance of Member States before and after 2020. This was recognised by the Commission in the Benchmark Report. In addition, the e-Government scores per country in the 2021 e-Government Benchmark Report are inconsistent because they were aggregated as the average of two indicators estimated with different methodologies without making the appropriate adjustments.
In the framework of the e-Government Benchmark, the Commission also measures the performance of countries against life events. Life events are a set of the most common digital public services for both businesses and citizens. Business life events include starting a business and early trading operations (e.g. registration of the company or of employees) and regular business operations (e.g. declaring and paying taxes online).\(^\text{16}\)

The analysis of the results for business life events included in the e-Government Benchmark shows an increase in the EU-27 average score from 71.1 % at the beginning to 79.9 % at the end of the implementation of the Action Plan (see Figure 2). The results show that:

- e-Government services for businesses are more mature than those offered to citizens;
- the majority of European administrations managed to improve digital services for businesses, and the process was also accelerated by the COVID-19 pandemic;
- there was uneven development in Member States. Some countries, mostly those below the average score (such as Hungary, Slovakia and Luxembourg) achieved significant progress in this period. By contrast, other countries (such as Sweden and Denmark) saw a slight decline over the same period.

\(^\text{16}\) The full list of life events used is described in the e-Government Benchmark Report itself.
The Commission’s proposed post-2020 policy makes provision for a monitoring system

46 As already stated in paragraphs 30-31, in contrast to the 2016-2020 Action Plan, the new proposed “Path to the Digital Decade” policy programme includes quantified targets and envisages a framework requiring Member States to report on progress in good time by providing relevant data and statistics. Moreover:

- for each digital target the Commission should set out key performance indicators in implementing acts once the Decision enters into force. The Commission can update the indicators when necessary to take account of technological developments;

- the Commission, in close cooperation with Member States, is required to define trajectories for attaining each of the digital targets, which would then serve as a basis for monitoring and for the national Digital Decade strategic roadmaps;
the envisaged annual progress report to the European Parliament and the Council may identify measures and actions to be taken by Member States in areas where progress towards the digital targets is deemed insufficient.

47 According to the proposal, monitoring would rely on an enhanced version of DESI, i.e. reflecting the targets set. We found that the 2021 edition of DESI had already been adapted (i) to align it to some extent with the targets included in the “Path to the Digital Decade”, (ii) to improve the methodology and (iii) to take account of the latest technological and policy developments. DESI is now structured around the four dimensions of the 2030 Digital Compass, replacing the previous five-dimension structure (see Box 6).

48 As the proposal for the Decision on the “Path to the Digital Decade” is still going through the legislative process (as of September 2022), the Commission opted to introduce changes to DESI gradually, meaning that it does not yet cover all targets. In particular, two of the three digital targets (2 and 3, see Box 4) have not yet been directly included in DESI: target (1) has been included but as there is no definition yet of “key” public services (see paragraph 30), it is not clear what will be measured.

The Commission implemented the Action Plan but actions at Member State level faced delays

49 The Action Plan included actions of various kinds, such as requiring the Commission to make legislative proposals, provide digital solutions and launch pilot projects.

50 In addition to the Commission’s actions, Member States were in certain cases obliged to take actions on the basis of legal acts that either already existed before the Action Plan (see Table 2), or were put in place as a result of it.

51 We therefore assessed whether:

- the Commission had completed its actions in good time;
- Member States had complied with their legal obligations.
The Commission implemented the actions included in the Action Plan

52 Based on our review of relevant documents, we found that the Commission completed the six actions of the 2016-2020 e-Government Action Plan that were included in the scope of the audit. For details, see Table 3 and Annex IV.

Table 3 – Implementation of e-Government actions included in the scope of the audit

<table>
<thead>
<tr>
<th>Action</th>
<th>State of implementation</th>
<th>Details of implemented Commission actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action 2 - accelerate the take-up of electronic Identification, Authentication and Trust Services (eIDAS services), including eID and eSignature</td>
<td>Implemented</td>
<td>The Commission set up, maintains and updates core service platforms (i.e. central hubs enabling trans-European connectivity) and interfaces, including the technical specifications, software and technical support for the connection of national applications. To accelerate the take-up the Commission established exchange forums, outsourced the relevant studies, organised seminars and carried out enforcement activities based on complaints received. However, more significant changes in take-up are expected from the new eIDAS Regulation proposed in June 2021.</td>
</tr>
<tr>
<td>Action 7 - submit a proposal for a Single Digital Gateway (i.e. a single point of access to information, procedures and assistance services online)</td>
<td>Implemented</td>
<td>The Commission submitted the proposal, which was subsequently approved as regulatory act (Regulation 2018/1724).</td>
</tr>
<tr>
<td>Action 9 - set up, in cooperation with the Member States, the mandatory interconnection of all Member States’ business registers</td>
<td>Implemented</td>
<td>The Commission set up, maintains and updates core service platforms (i.e. central hubs enabling trans-European connectivity) and interfaces, including the technical specifications, software and technical support for the connection of national registers. See also paragraph 52.</td>
</tr>
<tr>
<td>Action 10 - further develop the electronic interconnection of insolvency registers</td>
<td>Implemented</td>
<td></td>
</tr>
<tr>
<td>Action 11 - present an initiative to facilitate the use of digital solutions throughout a company’s lifecycle</td>
<td>Implemented</td>
<td>The Commission submitted the proposal, which was subsequently approved as regulatory act (Directive 2019/1151 amending Directive 2017/1132).</td>
</tr>
<tr>
<td>Action 13 - launch a pilot on the “once only” principle for business.</td>
<td>Implemented</td>
<td>The pilot project was launched.</td>
</tr>
</tbody>
</table>

Source: ECA.
We found that while actions 9 and 10 were implemented, the developed systems lacked a payment processing tool as its development incurred delays (see Box 7 for details). The development of a payment tool was not a legal requirement. However, while the systems provide the information required by the regulatory acts, the lack of a payment tool forces users to revert to national platforms should they need information or documents for which a fee is due.

**Box 7**

The delayed implementation of the payment processing tool for actions 9 and 10

Through the Business Registers Interconnection System, users of the European e-Justice Portal have access to company documents, including essential information required by legal acts. Certain documents are free of charge, but Member States are allowed to charge a fee for others. The Commission abandoned initial plans to develop a central payment system that would process the payments and issue invoices to the payee. Instead, it is considering developing a decentralised payment system, which will outsource the payment of company documents directly to the payment system provider of the national business register that is selling the document. The Commission estimates that the system could be deployed in the last quarter of 2023.

Similarly, the Commission has not yet implemented a payment processing tool for the interconnection of insolvency registers (action 10). Instead, it intends to use the same solution as for the Business Registers Interconnection System.

Source: ECA.

We also assessed whether the Commission followed-up the recommendations of its evaluation of the 2014 eIDAS Regulation linked to action 2 (eIDAS). The Regulation sought to create a single framework for electronic identification (eID) and trust services, thus making it more straightforward to deliver services across the EU, regardless of the country where they take place. The Regulation did not harmonise national eIDs but enabled mutual recognition through a notification and peer review process.
The evaluation of the eIDAS Regulation was issued in 2021. It identified the following weaknesses:

- The Regulation did not require Member States to provide their citizens and businesses with an eID to enable secure access to online public services. Even when they did, they were not obliged to notify such schemes. Moreover, the evaluation concluded that only a limited number of public services offer eIDAS authentication or are connected to the infrastructure, and technical errors prevent users from authenticating effectively.

- The eID framework could not address new market demands amongst others due to (i) its limitation to the public sector and to secure cross-border access to public services (meaning, the services targeted by the eIDAS Regulation concerned a small percentage of the EU’s population), (ii) the complexity for online private services providers to connect to the system and (iii) insufficient availability in all Member States.

- The framework is based on national eID systems following diverse standards thereby hampering the use of eIDAS services; a shortcoming also identified by a CEF project (see Box 8).
Box 8

Framework based on national eID systems following diverse standards.

One CEF project (2016-EU-IA-0064) promoted the uptake of eID by private service providers. If a service provider wants to confirm the identity of its clients, it must be connected to a specific national eIDAS node. The project aimed to connect five private service providers each operating a cloud platform (offering private services) to five different eIDAS nodes (Spain, Norway, Denmark, the Netherlands and Iceland, respectively). Such a connection makes it possible to request, receive and process identification data.

Implementation was subject to difficulties and delays as different countries had different policies for accessing national eIDAS nodes.

In Spain, Iceland, and Norway a direct connection was possible. However, service providers in the Netherlands had to access an intermediate node. For Denmark service providers had to develop and implement a special integration interface to access the Danish eIDAS node. Developing additional software using different technical standards made the connection process complex and time consuming.

Source: ECA.

56 We found that in response to these weaknesses, the proposed revision of the eIDAS regulation requires each Member State to issue an EU Digital Identity Wallet to all EU natural and legal persons in order to ensure that they have secure, trusted and seamless access to cross-border public and private services. Each Member State must also notify at least one electronic identification scheme, including at least one means of identification. Consequently, only once the Wallet is in use, technical standards of national eIDAS nodes would no longer need to be harmonised, as service providers would not have to connect to the system.

57 Since the Single Digital Gateway Regulation was adopted as a result of action 7 (Single Digital Gateway), we also assessed whether the Commission complied with the requirement of the new Regulation, namely to develop and maintain a common user interface (including a search engine and user feedback tools). The Single Digital Gateway facilitates online access to information, administrative procedures, and assistance services that EU citizens and businesses may need in another EU country.
We found that the Commission had developed the interface, i.e. the single point of entry, which is the Your Europe portal (see Figure 3). Through the portal users will be connected to the relevant national webpages where the service they are looking for is located. By December 2023 at the latest, Member States have to digitalise 21 procedures to make them accessible via the portal. Examples of procedures that are relevant for businesses are: requesting permission for a business activity or registering as an employer for pensions and social security. The first services available on this portal were launched on 12 December 2020.

Figure 3 – The Single Digital Gateway

[Diagram showing the Single Digital Gateway]

(*+) Public administrations, lawyers, judges, notaries, professionals.

Source: ECA.

With regard to actions 7 (Single Digital Gateway) and 13 (pilot once-only principle for business), we found that the pilot project financed by the EU research programme Horizon 2020 (project “TOOP”, funding of €8 million) was able to make advances in implementing the “once only” principle. The aim of the principle is that citizens and businesses supply information only once to a public administration in the EU. The project created a solution architecture that connects 40 information systems. Moreover, the architecture blueprint developed under the project became part of the Single Digital Gateway Regulation. As a result, the project, which started in 2017 with interoperability as its main focus, was adapted when the Regulation for the Single Digital Gateway was adopted in order to enable the technical system described in the regulation to be implemented.
Implementation of some digital public services delayed in Member States

Although the Action Plan only included actions for the Commission, the availability of the digital solutions largely depends on the implementation of complementary actions at Member State level. For the actions included in the scope of the audit, we found that despite the Commission’s efforts, three out of six actions were only partially implemented due to an insufficient or delayed response by Member States (see Table 4). As a result, the Commission’s actions between 2016 and 2020 have not yet resulted in substantial changes for businesses and citizens across the EU.

Table 4 – Implementation of e-Government solutions at Member State level

<table>
<thead>
<tr>
<th>Commission’s action</th>
<th>Related action at the Member State level</th>
<th>State of implementation at Member State level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action 2 - accelerate the take-up of electronic Identification, Authentication and Trust Services (eIDAS services), including eID and eSignature</td>
<td>Implementing Regulation 910/2014</td>
<td>Partially implemented</td>
</tr>
<tr>
<td>Action 7 - submit a proposal for a Single Digital Gateway (i.e. a single point of access to information, procedures and assistance services online)</td>
<td>Implementing Regulation 2018/1724</td>
<td>Partially implemented (deadline for implementation: December 2023)</td>
</tr>
<tr>
<td>Action 9 - set up, in cooperation with the Member States, the mandatory interconnection of all Member States’ business registers</td>
<td>Implementing Directive 2012/17, Directive 2017/1132 and Directive 2019/1151</td>
<td>Implemented with delays</td>
</tr>
<tr>
<td>Action 10 - further develop the electronic interconnection of insolvency registers</td>
<td>Implementing Regulation 2015/848</td>
<td>Partially implemented</td>
</tr>
<tr>
<td>Action 13 - launch a pilot on the “once only” principle for business.</td>
<td>Taking part in the pilot project.</td>
<td>Implemented</td>
</tr>
</tbody>
</table>

Source: ECA.
With regard to action 2 (eIDAS), the Member States’ response was voluntary. As a result, at the end of 2021, i.e. five years after the Regulation came into force, nine Member States, representing 41% of the population, were not yet part of the framework. This significant number of non-participating Member States significantly limits the possibilities for citizens and businesses to have safer, faster and more efficient electronic interactions.

For action 9 (interconnection of business registers) and action 10 (interconnection of insolvency registers), the Commission had to set up and update the core service platform and interface while Member States had to digitalise their national business and insolvency registers and connect them to the system (see Figure 4). The Commission used the e-Justice portal as an interface, and CEF funding was available to support Member States (referred to as “generic services” by CEF).

With regard to action 9 (interconnection of business registers) the Business Registers Interconnection System went live on 8 June 2017 and allows users to search for information on companies registered in any EU country (plus, Liechtenstein and Norway). The search function and basic information is translated from the relevant national languages into all EU official languages. Six Member States experienced delays.
in connecting\textsuperscript{17}, with the last one connecting in March 2022, almost five years after the deadline set in the relevant Directive and only after the Commission had referred it to the European Court of Justice in July 2021. During 2021, in terms of use, there were between 17 300 and 39 100 searches per month.

64 With regard to the system for \textbf{action 10 (interconnection of insolvency registers)} the relevant \textit{implementing regulation} required Member States to ensure interconnection by 30 June 2021. In July 2022, only 17 out of 26 Member States were connected (Denmark, was not bound by the Regulation\textsuperscript{18}). Five\textsuperscript{19} others are in the development and testing process. For the four remaining Member States\textsuperscript{20} the Commission is still awaiting feedback. Until the remaining nine Member States are connected, users cannot search via a uniform multi-lingual search engine for insolvent entities registered in these Member States. Such a central public electronic access point for data on debtors subject to insolvency proceedings is of particular use for existing or potential creditors, or third parties indirectly affected by such proceedings. During 2021, there were between 2 500 and 6 500 searches per month.

65 As a result of \textbf{action 11 (use of digital solutions throughout a company's lifecycle)}, Member States had to transpose Directive 2019/1151 on digital tools and processes in company law into national law by August 2021, unless they notified the Commission that they were applying the possible one-year extension. At the time of our audit, 17 Member States had provided such a notification. This indicates that companies in a majority of Member States cannot yet use digital tools and processes to create companies, register branches and file documents and information online.

\textsuperscript{17} The six Member States are: Bulgaria, the Czech Republic, Estonia, Ireland, Portugal and Romania.

\textsuperscript{18} In accordance with Articles 1 and 2 of Protocol No 22 on the position of Denmark annexed to the Treaty on European Union and the Treaty on the Functioning of the European Union, Denmark opted out of adopting Regulation 2015/848 and is neither bound by it nor subject to its application.

\textsuperscript{19} The five Member States are: Belgium, the Czech Republic, Italy, the Netherlands and Slovenia.

\textsuperscript{20} The four Member States are: Bulgaria, Greece, Hungary and Portugal.
We note that a majority of Member States that need more time for implementation of action 2 (eIDAS), action 10 (interconnection of insolvency registers) and action 11 (use of digital solutions throughout a company’s lifecycle) had an e-Government Benchmark score that was below the EU average both in 2017 and 2020 (see Figure 1).

As already stated (see Table 1 and paragraph 62), Member States could receive funding for connecting their systems to the platforms developed by the Commission. Member States used CEF funding in particular for:

- action 2 (eIDAS), €25.35 million for 26 Member States;
- action 9 (interconnection of business registers), €2.44 million for 10 Member States;
- and action 10 (interconnection of insolvency registers), €1.16 million for seven Member States.

Based on our audit of a sample of EU-funded projects (see paragraph 19), we found that the availability of EU-funding was seen as an opportunity by some Member States, and spurred their implementation of e-Government services. The CEF projects also helped to identify certain drawbacks of existing solutions (see Box 8).

23 out of the 24 audited projects and actions (i.e. those that were finalised by the time of our audit) met the stated objectives. In particular, they assured the interoperability of the developed solutions and re-used existing CEF building blocks (i.e. basic digital service infrastructures, which are key enablers to be reused in more complex digital services) or digital service infrastructures (i.e. solutions that support the implementation of EU-wide projects, providing trans-European interoperable services of common interest).

The Member States we interviewed appreciated the continuous technical support provided by the Commission when they used the CEF-funded digital service infrastructures or needed to integrate systems of other Member States, which have implemented these digital service infrastructures, especially for eIDAS services. In their opinion, the Commission’s actions made it possible to develop sustainable interconnections between various Member States’ systems.
The Commission did foster the exchange of good practices, but fell short in promoting new digital public services

70 The latest ministerial declarations (see paragraph 02) have recognised the importance of promoting the exchange of good practices, and creating links between the relevant authorities and available digital public services. Similarly, the European Parliament stressed21 the importance of promoting good practices.

71 We therefore assessed whether the Commission appropriately:

- fostered collaboration and the exchange of good practices;
- promoted the newly available digital public services.

The Commission created many opportunities for collaborating and exchanging good practices

72 We assessed the tools, which the Commission used to foster the exchange of good practices. We found that it had not only created groups where stakeholders could meet, but had also financed specific projects in this respect.

73 These groups included:

- the Action Plan Steering Board (see paragraph 11), which met two or three times a year and where Member States presented their progress on the development of e-Government solutions or good practice examples and challenges concerning the development of specific solutions. Since the Action Plan has come to an end, the Board ceased its activities in 2021;

- expert groups for specific subjects or solutions, such as an eIDAS expert group (action 2), a co-ordination Group for the Single Digital Gateway (action 7), an expert group on company law (actions 9 and 11) and an expert group on the interoperability of European public services. These expert groups continue to operate.

The projects concerned were mainly financed under:

- the ISA² programme, where co-operation and the exchange of good practices were actually core elements of the Commission’s interoperability policy and support actions (see Articles 3 and 8 of Decision 2015/2240). An example of a very comprehensive initiative is the Joinup Platform presented in Box 9 (financed under two ISA² actions included in the audited sample amounting to €6 million). After the ISA² programme ended, the Commission provided further financing for the Joinup Platform under the Digital Europe Programme at least for 2021 and 2022;

- Horizon 2020, which mainly gave rise to ad hoc initiatives for specific issues. One example is the SCOOP4C project, which built up a stakeholders’ community that shared experiences and good practice with regard to the implementation of the once-only principle (the Horizon 2020 financing amounting to €1 million). There is, however, no evidence that the community’s activities continued after financing for the project ended, even though the issue is still relevant.
Box 9

Joinup Platform – the EU’s dedicated interoperability cooperation and exchange platform

The Commission established Joinup in 2011 to provide a common venue that enables public administrations, businesses and citizens to share and reuse IT solutions and good practices, and facilitate communication and collaboration on IT projects across Europe. Joinup focuses on e-Government, semantic interoperability and open source software. The main features are the following:

- Joinup works as a catalogue, where users can easily find and download already developed solutions. It hosts more than 2,800 interoperability solutions, i.e. ready software tools or re-usable services, including CEF eID, eSignature, eHealth and eProcurement;

- Joinup hosts communities of practice, such as the European Interoperability Reference Architecture, the Sharing and Reuse of IT solutions, the community for the National Interoperability Framework Observatory, Open Source Observatory and Innovative Public Services;

- Joinup is also the entry point for the Interoperability Academy, which is designed to disseminate knowledge and promote exchanges between digital government practitioners and researchers. The Interoperability Academy hosts different types of learning resources and courses that vary from live events (e.g. workshops, webinars, seasonal schools and training) to self-paced courses (e.g. fully animated, or partly animated with the reuse of existing materials).

In 2021, the platform had around 18,000 registered users. It was visited nearly half a million times with over one million page views.

Source: ECA.

Based on our review of four ISA² actions (see Annex III), minutes of the meetings of the Steering Board and expert groups, and interviews with staff in the Member States, we conclude that the Commission provided good support for collaboration and the exchange of good practices, and that the exchanges between stakeholders took place on issues of interest to them.
We also found that the Commission took due account of the need to continue fostering cooperation and good practice when preparing the programmes for the 2021-2027 period:

- the work programme implementing the Digital Europe Programme for 2021 and 2022 includes coordination and support actions with the primary goal of promoting cooperation and/or providing support for EU policies;
- a mechanism for annual cooperation between the Member States and the Commission is envisaged in the “Path to the Digital Decade” proposal, (see paragraph 31).

The Commission did not promote digital public services in a comprehensive and coordinated manner

We assessed the Commission’s promotional activities of digital public services, and found that they lacked an overarching strategy. In practice, the promotion was either general or linked to specific actions or funding programmes where required by the legal base.

In terms of its general promotion of the e-Government policy and/or e-Government solutions, the Commission acted through:

- the eGovernment newsletter, which is issued once a month to subscribers, and provided the latest news about EU cross-border digital public services, the public services cloud, and public sector innovation;
- the eGovernment4EU group on the Futurium platform. This was accessible to the general public and provided information about the e-Government Action Plan 2016-2020 and future digital government policy. The group on the platform is no longer updated, as the Action Plan has come to an end;
- social media (Facebook, LinkedIn and Twitter).

In terms of communication strategy requested by the relevant legal base, for action 7 the Commission launched its promotion campaign in December 2020 when the Single Digital Gateway came into operation (see paragraph 58). We found it to be comprehensive and consider it good practice that the Commission discussed the campaign and the respective national events with national coordinators every month during videoconferences (called “Communication cafés”). Figure 5 presents the data on the number of visits to the Your Europe portal.
Similarly, the Decision establishing the ISA² programme required the promotion of the implementation of the European Interoperability Strategy, Framework and Reference Architecture, as well as of the relevant specifications and standards. We found the promotion campaign to be proactive and comprehensive. As well as setting up and running the Joinup Platform (see paragraph 74 and Box 9), the ISA² Programme financed an action (amounting to €3.62 million) that promoted collaboration and facilitated interaction between the programme’s stakeholders.

Lastly, the CEF also required a communication strategy to be implemented. We found that:

- such a strategy was developed to promote the CEF solutions that were of interest primarily for solution developers. The staff we interviewed in the Member States were positive about these solutions and confirmed that they reused them, in particular for cross-border services. The reuse of Digital Service Infrastructures is meant to ensure faster, easier and more cost-effective development of digital services using existing technologies, rather than having each organisation develop such services independently. According to the CEF reuse dashboard, by the end of 2021, building blocks were used in 353 projects mostly across the EU;

- the Commission has so far not organised specific awareness-raising or promotional campaigns to make potential users aware of the existence of either the Business Registers Interconnection System (in operation since 2017) or the system for the interconnection of insolvency registers (in operation since 2021),
both of which were developed under the CEF. The Commission informed us that it plans to have such a campaign (i) for the Business Registers Interconnection System once the payment processing tool is available (see Box 7) and (ii) for the system for the interconnection of insolvency registers once all Member States are connected to it (so far 17 are connected) (see paragraph 64). At the end of 2021, the Commission launched an online communication campaign for the e-Justice Portal, but only with very limited reference to the Business Registers Interconnection System.

82 Although user awareness is key to ensuring the take-up of e-Government services, we found that the Commission neither assessed how far businesses were aware, nor did it analyse needs in this area. The representatives of the European business associations that we interviewed stated that businesses are aware of the e-Government services that the law obliges them to use, but are far less aware of any other such services.

83 We found that there was nevertheless one aspect, eIDAS, where the Commission outsourced a study to analyse the electronic identification, authentication and trust services’ market and to develop and run a pilot programme to raise awareness of these solutions among SMEs:

- the study released in 2019 found a generally low level of awareness of eIDAS solutions among SMEs. This was found to be a key barrier;

- the pilot programme was run in late 2018 and included a knowledge and learning programme, an eIDAS Toolkit for SMEs, and a strategy to promote the SME Toolkit. The knowledge and learning programme and the eIDAS Toolkit for SMEs are still available online. Additionally, the eIDAS Observatory (an online collaborative platform launched by the Commission) creates a virtual community of stakeholders that aims to foster a common understanding of the issues relating to the implementation and uptake of the eIDAS Regulation.

84 Although the study recommended that the Toolkit should be developed further to take account of more specific user needs, and that a long-lasting stakeholder governance structure should be established, including Member States and regional representatives, SME associations and service providers, the Commission did not take any action in this respect. The Commission provided no justification why the recommendation from the study was not implemented.
We also assessed whether the Commission had any overview of promotional activities carried out by Member States, and whether it sought (i) to coordinate such activities, if any; or (ii) to disseminate good practices in this respect. We found that the Commission has no overview of Member States’ actions to promote European or national e-Government solutions. Consequently, it has not identified good practices, or been in a position to coordinate existing activities.
Conclusions and recommendations

86 Our overall conclusion is that the Commission’s actions have been only partially effective in fostering both the implementation and the take-up of e-Government solutions by Member States. Although the Commission completed the actions set out in the 2016-2020 e-Government Action Plan covered by our audit, not all newly developed digital public services are available across the EU due to actions being delayed in the Member States. Moreover, the Commission did not comprehensively promote these services among businesses and users in general.

87 Although the 2016-2020 EU e-Government Action Plan met the needs identified by consultations and assessments, it only included actions to be implemented by the Commission itself, thus making it difficult to achieve the stated vision. The Action Plan did not include any obligations for Member States, even though the evaluation report for the previous Action Plan had identified the voluntary nature of Member States’ activities as a main shortcoming. Nevertheless, this was mitigated by the fact that for most actions the relevant legal acts that either already existed before the Action Plan, or that were adopted as a result of it, included such obligations. However, in some cases the implementation of actions continued beyond 2020, and thus the end date of the Action Plan (see paragraphs 23-27).

88 We noted that the Commission’s 2021 proposal setting up the “Path to the Digital Decade” policy programme introduced a cooperation framework allowing the Commission to follow up on an annual basis Member States’ progress towards the digital targets set at EU level. However, one of the three targets is vaguely defined, with the risk that it may be interpreted differently by the Member States, which in turn may jeopardise the achievement of the target. According to the 2021 proposal setting up the “Path to the Digital Decade”, the Commission should define key performance indicators for each digital target in implementing acts (see paragraphs 28-31 and 46-48).

89 Monitoring of the implementation of the Action Plan was fragmented in that the Commission had not set up a monitoring framework (including indicators) for the Action Plan as a whole. Such a framework was however in place for a number of individual actions (four out of the six covered by our audit). The existing e-Government indicators (the e-Government Benchmark and the Digital Economy and Society Index) published annually by the Commission were not directly linked to any of the actions implemented under the Action Plan, and were consequently not suited to measuring its impact (see paragraphs 32-45).
The Commission completed the six actions targeting businesses and therefore covered by our audit. It also supported the implementation of e-Government solutions by Member States through EU-financed projects, and by providing technical support, which was appreciated by staff in the Member States we interviewed (see paragraphs 49-69).

Notwithstanding these efforts, three out of six actions were only partially implemented across the EU. In two cases (interconnection of insolvency registers and digital solutions throughout a company’s lifecycle) this was due to delays in several Member States (for some of which the Commission has no information on progress). In one case (electronic identification, authentication and trust services, eIDAS), the relevant regulation left it optional for Member States to act. As a result, the Commission’s actions between 2016 and 2020 have not yet resulted in substantial changes for businesses and citizens across the EU. Another action (Business Registers Interconnection System) was implemented with delays in some Member States, but the solution has been available in all Member States since March 2022 (see paragraphs 60-65).

We note that in the 2021 proposal setting up the “Path to the Digital Decade”, the Commission introduced the concept of (i) Digital Decade roadmaps to be prepared by Member States; and (ii) trajectories to be defined for each Member State with a view to attaining the digital targets. However, as the proposal is still going through the legislative process (as of September 2022), it may be subject to amendments (see paragraph 46).

With regard to eIDAS, the Commission presented a proposal in 2021 to amend the existing regulation in response to an evaluation of it. It addresses most of the weaknesses, and – most importantly – now requires each Member State to provide an electronic identification scheme (see paragraphs 54-56).
Recommendation 1 – Strengthen the implementation framework to urge Member States to complete e-Government services

Given the Commission’s proposal for a Decision establishing the 2030 “Path to the Digital Decade” policy programme, the Commission should encourage further development of e-Government services and their monitoring by:

(a) unequivocally defining the terms used in the digital targets so that they can be applied in the same way across the EU;

(b) analysing the Digital Decade national roadmaps and taking the necessary action if it judges that the policies, measures and actions set out therein are insufficient, putting at risk the timely achievement of the targets set in the Decision;

(c) taking action if Member States experience delays in attaining the digital targets when compared to their planned trajectories.

Target implementation date: after the adoption of a proposal for a Decision establishing “Path to the Digital Decade”, in accordance with deadlines defined in the Decision

94 The Commission actively fostered collaboration and exchanges of good practices in many ways (e.g. expert groups, and platforms), and this was viewed positively by staff in the Member States. In its proposed post-2020 “Path to the Digital Decade” policy document, the Commission gave due regard to the need to continue this support (see paragraphs 70-76).

95 The Commission did not have an overarching strategy to promote amongst key users the e-Government solutions available at EU level. This meant that its promotion activities were not comprehensive or coordinated. It promoted solutions only where required by relevant legal acts, and so did not cover all of them (see paragraphs 77-78).

96 When the Commission did run communication campaigns, these were good. However, although the Commission promoted technical solutions developed by the Connecting Europe Facility among developers, it has not yet promoted new services, such as the Business Registers Interconnection System and system for the interconnection of insolvency registers, among users. The Commission also has no overview of actions undertaken by Member States to promote national or European e-
Government solutions, even though coordinated efforts may yield better results (see paragraphs 79-81 and 85).

97 The Commission did not assess businesses’ awareness of available e-Government services, and did not analyse needs in this area, even though this is a key step in the take-up of e-Government services. The only exception here was the eIDAS market: the Commission carried out a study and ran a pilot knowledge and learning programme among small and medium-sized enterprises. Amongst others, it resulted in a toolkit for these enterprises. Although the study recommended that the toolkit should be developed further, the Commission took no action in this respect (see paragraphs 82-84).

**Recommendation 2 – Develop a comprehensive strategy to promote e-Government services effectively**

In order to provide more effective support for the further take-up of European-wide e-Government services, the Commission should develop a comprehensive strategy to promote e-Government services effectively, based on an assessment of the level of awareness of available e-Government services among users. The strategy should take account of activities undertaken in this regard by Member States in order either to facilitate their efforts or to ensure efforts are not duplicated.

**Target implementation date: end 2024**

This report was adopted by Chamber IV, headed by Mr Mihails Kozlovs, Member of the Court of Auditors, in Luxembourg at its meeting of 11 October 2022.

*For the Court of Auditors*

Tony Murphy

President
### Annex I – E-government developments in the EU since 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Funding</th>
<th>Legislation</th>
<th>Political initiatives</th>
</tr>
</thead>
</table>
• Infrastructure for Spatial Information in Europe (INSPIRE) Directive No. 2007/2/EC | • Signing of the Malmö Ministerial Declaration on e-Government  
• Adoption of the e-Government Action Plan 2006-2010 |
| 2010 | • Connecting Europe Facility, Telecom sector (2014-2020) | • Directive No. 2011/24/EU on the application of patients' rights in cross-border healthcare | • Adoption of the Digital Agenda for Europe  
• First European Interoperability Framework |
| 2011 | • ISA2 Programme (2016-2020) | • Internal Market Information System (IMI) Regulation No. 1024/2012 | |
| 2012 | • Horizon 2020, Societal Challenges (2014-2020)  
• eIDAS Regulation No. 910/2014  
• eInvoicing Directive No. 2014/55/EU on Public Procurement | |
• Adoption of the e-Government Action Plan 2016-2020 |
| 2017 | • Structural Reform Support Programme (2017-2020) | | • Signing of the Tallinn Ministerial Declaration on e-Government  
• New European Interoperability Framework  
• Interoperability Action Plan |
• Directive No. 2019/1151 on use of digital tools and processes in company law  
• Open Data Directive No. 2019/1024 | • Signing of the Berlin Ministerial Declaration |
| 2021 | | | • 2030 Digital Compass |
| upcoming | | • new eIDAS Regulation | • Digital Programme «Path to the Digital Decade» |

Source: ECA.
## Annex II – E-Government Action Plan – list of actions

<table>
<thead>
<tr>
<th>Policy priority</th>
<th>Action</th>
<th>Target date</th>
<th>DG responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernise public administration with ICT, using key digital enablers</td>
<td>1. Support the transition of Member States towards full e-procurement and use of contract registers.</td>
<td>2019</td>
<td>GROW</td>
</tr>
<tr>
<td>2. Accelerate the take-up of eIDAS services, including eID and eSignature.</td>
<td>2016</td>
<td>CNECT</td>
<td></td>
</tr>
<tr>
<td>3. Ensure the long-term sustainability of cross-border digital services infrastructure.</td>
<td>2018</td>
<td>CNECT</td>
<td></td>
</tr>
<tr>
<td>4. Present a revised version of the European Interoperability Framework (EIF) and support its take-up by national administrations.</td>
<td>2016-2019</td>
<td>DIGIT</td>
<td></td>
</tr>
<tr>
<td>5. Coordinate the development of a prototype for a European Catalogue of ICT standards for public procurement.</td>
<td>2017</td>
<td>GROW</td>
<td></td>
</tr>
<tr>
<td>6. The Commission will use the common building blocks such as CEF digital service infrastructures and follow the European interoperability framework. It will gradually introduce the 'digital by default' and &quot;once-only&quot; principles, elvoicing and eProcurement and assess the implication of a possible implementation of the 'no legacy' principle.</td>
<td>2016-2019</td>
<td>DIGIT</td>
<td></td>
</tr>
<tr>
<td>Enabling cross-border mobility with interoperable digital public services</td>
<td>7. Submit a proposal for a Single Digital Gateway.</td>
<td>2017</td>
<td>GROW</td>
</tr>
<tr>
<td>8. Make the European e-Justice Portal a one-stop shop for information on European justice issues.</td>
<td>2016</td>
<td>JUST</td>
<td></td>
</tr>
<tr>
<td>9. Set up in cooperation with the Member States, the mandatory interconnection of all Member States' business registers.</td>
<td>2017</td>
<td>JUST</td>
<td></td>
</tr>
<tr>
<td>10. Further develop the electronic interconnection of insolvency registers.</td>
<td>2019</td>
<td>JUST</td>
<td></td>
</tr>
<tr>
<td>11. Present an initiative to facilitate the use of digital solutions throughout a company's lifecycle.</td>
<td>2017</td>
<td>JUST</td>
<td></td>
</tr>
<tr>
<td>Policy priority</td>
<td>Action</td>
<td>Target date</td>
<td>DG responsible</td>
</tr>
<tr>
<td>----------------</td>
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<td>----------------</td>
</tr>
<tr>
<td></td>
<td>12. Present a legislative proposal to extend the Single Electronic Mechanism for registration and payment of VAT.</td>
<td>2016</td>
<td>TAXUD</td>
</tr>
<tr>
<td></td>
<td>13. Launch a pilot on the “once only” principle for business.</td>
<td>2016</td>
<td>CNECT</td>
</tr>
<tr>
<td></td>
<td>14. Establish a single window for reporting purposes in maritime transport and digitalise transport e-documents.</td>
<td>2018</td>
<td>MOVE (with TAXUD)</td>
</tr>
<tr>
<td></td>
<td>15. Complete the setup of the Electronic Exchange of Social Security Information.</td>
<td>2019</td>
<td>EMPL</td>
</tr>
<tr>
<td></td>
<td>16. Further develop the EURES European Job Mobility portal.</td>
<td>2017</td>
<td>EMPL</td>
</tr>
<tr>
<td></td>
<td>17. Support Member States in the development of cross-border eHealth services.</td>
<td>2016-2018</td>
<td>SANTE</td>
</tr>
<tr>
<td>Facilitating digital interaction between administrations and citizens/businesses for high-quality public services</td>
<td>18. Assess the possibility of applying the “once only” principle for citizens in a cross-border context.</td>
<td>2019</td>
<td>CNECT</td>
</tr>
<tr>
<td></td>
<td>19. Accelerate the deployment and take-up of the INSPIRE Directive data infrastructure.</td>
<td>2016-2020</td>
<td>ENV</td>
</tr>
<tr>
<td></td>
<td>20. Transform its websites to support increasing engagement and participation of citizens and businesses in EU programmes and policy making.</td>
<td>2018</td>
<td>COMM</td>
</tr>
<tr>
<td></td>
<td>22. Electronic Official Control for food and plant products – implement a fully dematerialised environment to sustain the free and secure movement of safe food and plant products (new May 2017).</td>
<td>2020</td>
<td>SANTE</td>
</tr>
<tr>
<td></td>
<td>25. 'Urban Digital Transition' actions (new May 2017).</td>
<td>2018</td>
<td>REGIO and CNECT</td>
</tr>
</tbody>
</table>

Source: ECA.
### Annex III – List of EU funded projects audited

<table>
<thead>
<tr>
<th>Fund</th>
<th>Action/Project No</th>
<th>Action/Project name</th>
<th>EU contribution (in euros)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting Europe Facility</td>
<td>2014-PL-IM-0002</td>
<td>Setting-up and operation of the Pan-European Proxy Service at national level in Poland</td>
<td>200 000</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2014-DK-IM-0004</td>
<td>Danish eID node and operations</td>
<td>150 000</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2015-DE-IA-0065</td>
<td>TREATS (TRans-European AuThentication Services)</td>
<td>560 378</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2015-DK-IA-0091</td>
<td>Integrating Danish e-services to national eID gateway</td>
<td>909 528</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2016-IT-IA-0007</td>
<td>Business Registers Interconnection System (BRIS) IT</td>
<td>178 306</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2016-RO-IA-0041</td>
<td>Romanian Electronic System for interconnection of National Trade Register Office with BRIS</td>
<td>332 221</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2016-ES-IA-0047</td>
<td>Interconnection of Insolvency Registers (IRI) Spain</td>
<td>118 266</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2016-EU-IA-0064</td>
<td>eID@Cloud - Integrating the eldentification in European cloud platforms according to the eIDAS Regulation</td>
<td>676 723</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2016-EU-IA-0074</td>
<td>IRI for Europe</td>
<td>711 248</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2017-SK-IA-0005</td>
<td>Interconnection of Insolvency Registers IRI for Slovakia</td>
<td>104 625</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2017-CY-IA-0023</td>
<td>Interconnection of Insolvency Registers - Cyprus</td>
<td>229 998</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2017-HU-IA-0027</td>
<td>Integration of Hungarian Business Register to EU BRIS</td>
<td>216 489</td>
</tr>
<tr>
<td>Fund</td>
<td>Action/Project No</td>
<td>Action/Project name</td>
<td>EU contribution (in euros)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Connecting Europe Facility</td>
<td>2017-RO-IA-0038</td>
<td>Operation and Maintenance for Romanian BRIS Access Point</td>
<td>37,978</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.05</td>
<td>European Public Procurement Interoperability Initiative</td>
<td>7,682,403</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.11</td>
<td>Automatic Business Reporting</td>
<td>149,927</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.20</td>
<td>Joinup – European Collaborative Platform and Catalogue</td>
<td>5,473,606</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.22</td>
<td>Community Building and Effective Use of Collaborative Platforms</td>
<td>502,328</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.27</td>
<td>CAMSS – Common Assessment Method Standards and Specifications</td>
<td>1,208,659</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.30</td>
<td>Raising Interoperability Awareness – Communication Activities</td>
<td>3,620,012</td>
</tr>
<tr>
<td>ISA²</td>
<td>2016.31</td>
<td>Sharing and Re-use</td>
<td>3,036,585</td>
</tr>
<tr>
<td>ISA²</td>
<td>2017.05</td>
<td>Interoperability Requirements for the Single Digital Gateway Implementation</td>
<td>220,000</td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>737460</td>
<td>The Once Only Principle Project (TOOP)</td>
<td>7,996,708</td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>737492</td>
<td>Stakeholder community for once only principle: Reducing administrative burden for citizens (SCOOP4C)</td>
<td>992,480</td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>870635</td>
<td>Digital Europe for All (DE4A)</td>
<td>7,997,861</td>
</tr>
</tbody>
</table>

Source: ECA.
### Annex IV – Implementation of actions included in the scope of the audit

<table>
<thead>
<tr>
<th>Action</th>
<th>Commission’s responsibilities</th>
<th>Member States’ responsibilities</th>
<th>State of play</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Accelerate the take-up of eIDAS services, including eID and eSignature.</td>
<td>• Set up, maintain and update the Core Service Platform including the technical specifications, software and technical support for the connection of national eIDAS platforms (nodes) • Establish exchange forums • Outsource the relevant studies • Organise seminars • Carry out enforcement activities based on complaints received</td>
<td>• Develop an eIDAS scheme • Develop the national eIDAS platform (node) using funding under CEF Generic Services Projects • Notify scheme(s)</td>
<td>• 18 Member States had either notified (14) or pre-notified (4) an eID system. This means that nine Member States are not yet participating. • CEF funding for eID and eSignature amounted to €20.39 million for Core Service Platforms and €25.35 million for 72 Generic Services projects in 26 countries. • Taking account of the shortcomings of the eIDAS Regulation, in June 2021 the Commission presented a proposal for a new regulation establishing a framework for a European Digital Identity.</td>
</tr>
</tbody>
</table>

| 7. Submit a proposal for a Single Digital Gateway (i.e. single point of access to information, procedures and assistance services online). | • Submit a proposal for a legal act • Implement the Single Digital Gateway Regulation: development, availability, monitoring, update, maintenance, security and hosting of the Your Europe portal (the common user interface), including the search engine, the repository for links, the common assistance service finder, user feedback tools | • Digitalise 21 procedures to be offered online under the Single Digital Gateway Regulation • Develop, make available, monitor, update, maintain and secure ICT applications related to the national websites and webpages that they manage and that are linked to the common user interface (Your Europe) | • The first services were launched on 12 December 2020 and are available from the single point entry on the Your Europe portal. • By the end of 2023, Your Europe will offer access to 21 online procedures in all EU countries that will be fully digitalised with no need for paperwork. |

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**Regulation 910/2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC**

**Regulation 2018/1724 establishing a Single Digital Gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation 1024/2012**
<table>
<thead>
<tr>
<th>Action</th>
<th>Legal Base</th>
<th>Commission’s responsibilities</th>
<th>Member States’ responsibilities</th>
<th>State of play</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Set up in cooperation with the Member States, the mandatory</td>
<td>Directive 2012/17, repealed by Directive 2017/1132 Implementing Regulation</td>
<td>• Set up, maintain and update the Core Service Platform and interface (e-Justice Portal),</td>
<td>• Digitalise national registers • Connect national registers using funding under CEF Generic Services</td>
<td>• More than four years since the Business Registers Interconnection System was deployed, the Commission has not yet implemented the Business Registers Interconnection System’s payment processing tool.</td>
</tr>
<tr>
<td>interconnection of all Member States’ business registers.</td>
<td>(IR) 2015/884 Directive 2019/1151 (amending Directive 2017/1132) IR</td>
<td>including the technical specifications, software and technical support for the connection</td>
<td>Projects</td>
<td>CEF funding amounted to €8 million for the Core Service Platform and €2.44 million for 16 Generic Services projects in 10 countries.</td>
</tr>
<tr>
<td></td>
<td>2020/2244 (repealing IR 2015/884) IR 2021/1042 (repealing IR 2020/2244)</td>
<td>of national registers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Further develop the electronic interconnection of insolvency</td>
<td>Regulation 2015/848 Implementing Regulation 2019/917</td>
<td>• Set up, maintain and update the Core Service Platform and interface (e-Justice Portal),</td>
<td>• Digitalise national registers • Connect national registers using funding under CEF Generic Services</td>
<td>• Only 17 out of 26 (i.e. 27 minus one which opted out) Member States connected. Five others are in the development and testing process. This means that four Member States are not yet participating.</td>
</tr>
<tr>
<td>registers.</td>
<td></td>
<td>including the technical specifications, software and technical support for the connection of</td>
<td>Projects</td>
<td>CEF funding amounted to €1.16 million for four Generic Services Projects in 7 countries.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>national registers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Present an initiative to facilitate the use of digital solutions</td>
<td>Directive 2019/1151 amending Directive 2017/1132</td>
<td>• Submit a proposal for a legal act</td>
<td>• Implement Directive 2019/1151</td>
<td>• Member States had to transpose Directive 2019/1151 by August 2021, unless they declared they were applying the possible one-year extension. Seventeen Member States declared that they were using the extension.</td>
</tr>
<tr>
<td>throughout a company’s lifecycle.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Legal Base</td>
<td>Commission’s responsibilities</td>
<td>Member States’ responsibilities</td>
<td>State of play</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
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<td>---------------------------------</td>
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<td></td>
</tr>
</tbody>
</table>
| 13. Launch a pilot on the “once only” principle for business. | • Launch a pilot project | • TOOP’s consortium of 51 organisations consisted of 19 national administrations (or bodies authorised by them) from 17 different Member States and two Associated Countries. | • Created a solution architecture that connects 40 information systems.  
• The architecture blueprint developed under the project has become part of the Single Digital Gateway Regulation and the technical outputs have been handed over to CEF.  
• Horizon 2020 funding of 98.52 % of the overall project budget of €8.12 million. |

Source: ECA.
Acronyms and abbreviations

**CEF**: Connecting Europe Facility

**DESI**: Digital Economy and Society Index

**DG CONNECT**: Directorate-General for Communications Networks, Content and Technology

**DG DIGIT**: Directorate-General for Informatics

**DG GROW**: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

**DG**: Directorate-General

**eID**: electronic Identification

**eIDAS**: electronic Identification, Authentication and trust Services

**ICT**: Information and Communication Technology

**ISA2**: Interoperability solutions for European public administrations, businesses and citizens

**SMEs**: Small and medium-sized enterprises
Glossary

**Architecture blueprint**: In the context of information technology, this is a generic diagram used to visualise the high-level architecture of an enterprise's systems on a conceptual, logical, or physical level. It shows the main components and the interrelationships between them.

**Artificial Intelligence**: Using computers to simulate human intelligence through capabilities such as learning and problem-solving.

**Big data**: Large amounts of unstructured data from diverse sources, and its processing, collection, storage and analysis to reveal meaningful patterns, trends and associations.

**Cloud (Computing)**: The remote processing and storage of data through the internet.

**Connecting Europe Facility**: EU instrument providing financial support for the creation of sustainable interconnected infrastructure in the energy, transport, and information and communication.

**Core Service Platforms**: Central hubs which enable trans-European connectivity. This part of a digital service infrastructure is managed, implemented and operated by the Commission.

**Digital Economy and Society Index (DESI)**: Tool for monitoring the EU’s overall digital performance and tracking Member States’ progress towards digital competitiveness.

**Digital Identity Wallet**: Application for storing personal data and documents digitally.

**Digital Service Infrastructures (DSIs)**: Framework providing support for EU-wide projects to establish interoperable digital services; consists of core service platforms and generic services.

**Digital Single Market**: Area without internal borders for digital services

**e-Government Benchmark**: indicator comparing how governments in 36 European countries deliver digital public services.

**eID**: eIDAS service to facilitate the mutual recognition of national electronic identification schemes between Member States

**eIDAS**: Electronic identification and trust services for electronic transactions in the internal market.
**eSignature**: eIDAS service that supports public administrations and businesses in the use of electronic signatures.

**European e-Justice Portal**: EU website with information on Member States' legal systems, legal aid, legal databases and insolvency and property registers.

**European Interoperability Framework**: Guidance document setting out a common approach to linking together the delivery of digital public services across the EU.

**Generic Services**: Gateway services linking one or more pieces of national infrastructure to core service platform(s).

**Interoperability**: Ability of a system to communicate and work with other systems, including by exchanging data.

**ISA²**: EU programme that supported the development of interoperable cross-border and cross-sector public services.

**IT blueprint**: A planning tool or document that an information technology organisation creates in order to guide its priorities, projects, budgets, staffing and other IT strategy-related initiatives. An IT blueprint outlines the organisation's future goals and documents the specific steps needed to accomplish them.

**Key enablers (e-Government Benchmark)**: Digital tools such as electronic identification (eID), eDocuments, digital post that support secure identification and communication between a user and a government service.

**Life events (e-Government Benchmark)**: Packages of government services which are usually provided by multiple government agencies around a common theme from the perspective of the citizen or entrepreneur concerned. The eGovernment Benchmark covers eight life events (government domains).

**Once only principle**: Principle that people and businesses should have to supply information to a public administration in the EU only once, and that administrations should share this information with one another.

**Open-source software (OSS)**: Software whose source code can be freely used, modified and shared by anyone.

**Single Digital Gateway**: Single point of access to information, procedures and assistance services online.
**Trust services:** Provision and preservation of digital certificates used to create and validate electronic signatures and authenticate signatories, or to authenticate websites.
Commission’s replies


Timeline

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This performance audit was carried out by Audit Chamber IV Regulation of markets and competitive economy, headed by ECA Member Mihails Kozlovs. The audit was led by ECA Member Ivana Maletić, supported by Sandra Diering, Head of Private Office and Tea Vlainic, Private Office Attaché; Marion Colonerus, Principal Manager; Agnieszka Plebanowicz, Head of Task; Maria Echanove, and Stefan-Razvan Hagianu, Auditors. Mark Smith provided linguistic support.

*From left to right: Maria Echanove, Marion Colonerus, Stefan-Razvan Hagianu, Ivana Maletić, Agnieszka Plebanowicz, Tea Vlainic, Sandra Diering.*
In the light of the increasing importance of digital services, this report assesses the effectiveness of the 2016 Commission’s Action Plan aimed at fostering e-Government in the EU. We found that the Commission successfully completed the actions covered by our audit.

It also supported the implementation of digital services in Member States through funding, technical support and fostering collaboration. However, not all digital services are available across the EU due to delays in Member States.

The Commission’s monitoring was limited to some individual actions rather than the implementation of the Plan as a whole.

In addition, there was no overarching strategy to promote the e-Government solutions available at EU level among key users.

We make a number of recommendations to address these issues.

ECA special report pursuant to Article 287(4), second subparagraph, TFEU.