A contribution to simplification of EU research programme beyond Horizon 2020

Briefing Paper
March 2018
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Paragraph</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>I - IV</td>
</tr>
<tr>
<td>EU research and innovation programme Horizon 2020</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Dilemmas inherent to simplification</td>
<td>4 - 10</td>
</tr>
<tr>
<td>Stability and change</td>
<td>4</td>
</tr>
<tr>
<td>Accountability and ownership</td>
<td>5</td>
</tr>
<tr>
<td>Legal certainty and discretion</td>
<td>6 - 7</td>
</tr>
<tr>
<td>Beneficiaries interest and EU interest</td>
<td>8</td>
</tr>
<tr>
<td>Regional spread and excellence</td>
<td>9</td>
</tr>
<tr>
<td>The dilemmas in perspective</td>
<td>10</td>
</tr>
<tr>
<td>Horizon 2020: a complex system</td>
<td>11 - 22</td>
</tr>
<tr>
<td>Design of Horizon 2020</td>
<td>11 - 16</td>
</tr>
<tr>
<td>Model Grant Agreement</td>
<td>13 - 14</td>
</tr>
<tr>
<td>Work programme</td>
<td>15</td>
</tr>
<tr>
<td>Participant portal</td>
<td>16</td>
</tr>
<tr>
<td>Management of Horizon 2020</td>
<td>17 - 19</td>
</tr>
<tr>
<td>The Commission</td>
<td>17</td>
</tr>
<tr>
<td>The unique role of the Common Support Centre (CSC)</td>
<td>18 - 19</td>
</tr>
<tr>
<td>Decision making process</td>
<td>20 - 22</td>
</tr>
<tr>
<td>Funding model</td>
<td>23 - 30</td>
</tr>
<tr>
<td>Transition from FP6 to FP7 and Horizon 2020</td>
<td>23</td>
</tr>
<tr>
<td>Lump sum project funding</td>
<td>24 - 26</td>
</tr>
<tr>
<td>Acceptance of beneficiaries’ accounting practices</td>
<td>27 - 28</td>
</tr>
<tr>
<td>Evolution of the error rate</td>
<td>29 - 30</td>
</tr>
</tbody>
</table>
Participation and excellence 31 - 37
  Application rate, success rate and participation rate 31 - 35
  Geographical discrepancies 32 - 34
  Discrepancies among beneficiary groups 35
  Widening actions and seal of excellence 36 - 37
A contribution to simplification for research beyond horizon 2020 38 - 42
  Where can we identify simplification? 38 - 41
  Proposals for simplification beyond Horizon 2020 42

Annex I - ECA’s work on EU Framework Programmes for Research and Innovation
Annex II - List of workshops and conferences attended by ECA
Annex III - Overview of significant simplifications introduced since FP5
Annex IV - Basic legislation and guidelines for Framework Programmes
EXECUTIVE SUMMARY

I. The European Parliament (EP) and the Council asked the European Court of Auditors (ECA) for input for the preliminary legislative discussion on the successor of Horizon 2020 (“FP9”). This briefing paper addresses these requests and focusses on the issue of simplifying the European Union’s (EU) research Framework Programmes. Our analysis shows that simplification is complicated and identifies several proposals to bring focus to the discussion on FP9 that is now taking place.

II. We describe a number of dilemmas\(^1\) that have affected the Commission’s efforts to simplify the implementation of EU research and innovation programmes. We used information from the Commission\(^2\) and beneficiaries\(^3\), and from our experience in audit work\(^4\) (Annex I and Annex II) to relate these dilemmas to the design of the regulatory framework, the funding model and the participation scheme.

III. We would like to draw attention to the following proposals to be considered to bring more focus on the discussion on FP9 that is taking place now: 1) a reasonable timespan between adoption and implementation of legal acts; 2) the use of lump sum and prizes; 3) the use of guidelines as non binding rules; 4) the acceptance of beneficiaries’ accounting practices and 5) the recognition of good project proposals under Horizon 2020 in other programmes via an one-stop-shop approach.

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1. We define dilemmas as competing priorities for which the Commission and the budgetary authority need to find the right balance.

2. For example, a non-comprehensive collection of valuable information is provided by the European Commission (EC) on its “FP Programme Evaluation Monitoring Documents” website. This website contains more than 400 review documents. 

3. For example: European University Association (EUA), European Association of Research and Technology Organisations (EARTO), League of European Research Universities (LERU), Informal Group of RTD Liaison Offices (IGLO), IDEA-league (strategic alliance among five leading European universities of technology), European Association of Research Managers and Administrators (EARMA), Helmholtz Association of German Research Centres e.V., Business Europe, CLEPA European Association of Automotive Suppliers, etc.

IV. This briefing paper is not an audit report. We are conducting a performance audit on “simplification in Horizon 2020” with a special report due to be published in late 2018. This forthcoming report will provide an audit assessment with regard to the effectiveness of the Commission’s simplification measures to support the discussion on the implementation of FP9 that starts in late 2018.

EU RESEARCH AND INNOVATION PROGRAMME HORIZON 2020

1. Horizon 2020 is an EU research and innovation programme, with nearly €80 billion of funding made available over seven years (2014 to 2020). It is one of the largest public research and development funding programmes in the world and accounts for around 8 % of the EU budget. Participants can be grouped as follows: universities, research institutions, small and medium-sized enterprises (SME), large companies and public bodies. To date, more than 130 000 applications have been submitted and almost 20 000 projects have received funding.

2. Horizon 2020 is complex due to the entirety of regulations, rules, guidelines, procedures and processes for implementation (including control and audit) and the multitude of funding instruments. Unnecessary complexity brings the following risks: irregularity (if the rules are complex or unclear, the probability of non-compliance is high), inefficiency (too much might be spent on administration or on funded projects) and ineffectiveness (performance targets could be missed).

3. For Horizon 2020, the Council (2011) called for “a new balance between trust and control” and the EP (2010) for a “more trust-based and risk-tolerant” approach towards participants. There have been many simplification initiatives for the EU programme for

6. Figures provided by the Commission.
research and innovation in particular (Annex III). While simplification is desired, some complexity is needed to ensure that the policy objectives can be achieved and that EU funds can be allocated properly.

**DILEMMAS INHERENT TO SIMPLIFICATION**

**Stability and change**

4. Stability is to use the same set of rules for successive research and innovation programmes, whereas change requires additional efforts from participants to adjust to new rules. Change provides a space for improvements, but it could also result in participants having to adapt to different sets of rules under different research programmes (since many Horizon 2020 grants will still be ongoing for several years after the start of FP9)\(^9\)\(^10\)\(^11\) (box 1).

**Box 1 – Beneficiaries appreciate stability**\(^12\)

The League of European Research Universities (LERU) represents 23 universities. In June 2010 LERU published an advice paper: “Towards an effective 8th framework programme for research”. This paper was partly a response to the Commission’s Communication on simplifying the implementation of the research Framework Programmes. The paper stated (paragraph 27) that: “optimisation is strongly desired in worst cases, but stability of rules is a measure of simplification itself and is preferred to the change towards only slightly simpler rules. Too many consecutive changes should be avoided.”

\(^9\) We analysed five dilemma’s but there are more, such as : national and EU interests, small and big industry, public and private R&D spending and State Aid issues (Lamy report, p. 17 - 18).

\(^10\) OECD 2010, Strategy and policies for better regulation, United Kingdom p. 38 OECD 2010, Strategy and policies for better regulation, p. 38.


\(^12\) LERU advice paper “Towards an effective 8th framework programme for research” Nr. 2, May 2010, p. 10 paragraph 27.
Accountability and ownership

5. Accountability implies placing the burden of proof on the beneficiary for the use of EU funds. Ownership implies relying on beneficiaries for self management and self-regulation. It would be easier to disburse grants for research, without asking beneficiaries to account for the public money received. But accountability is essential for public trust. The pursuit of accountability, however, could lead to excessive caution in efforts to simplify complex research regulations and create a hindrance to research work (box 2).

Box 2 – Researchers demand a balance between proper accountability and a reasonable administrative burden

As part of accountability, on top of the need to demonstrate sound financial management of expenditure, for monitoring and evaluation purposes, the Commission requires information and data on the economic and societal impact of the EU funding for research and innovation. “The aim of the upcoming Framework Programme is adapting reporting and monitoring requirements, limiting when possible the number of KPIs, building on existing indicators, and focusing on impact indicators”\(^{13}\).

Legal certainty and discretion

6. Legal certainty is important because beneficiaries bear the financial risk of interpreting provisions wrongly. Legal certainty means that only one interpretation of a given rule should prevail; “(...) every measure of the institutions having legal effects must be clear and precise and must be brought to the notice of the person concerned in such a way that he can ascertain exactly the time at which the measure comes into being and starts to have legal effects (...)”\(^{14}\).

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\(^{13}\) Stakeholders’ Workshop on ideas for further simplification on the implementation of the R&I Framework programmes, Brussels 20 October 2017, p. 12.

\(^{14}\) See Case Opel Austria, T-115/94 paragraph 124, referring to: Case 169/80 Administration des Douanes v Gondrand Frères and Garancini [1981] ECR 1931, paragraph 17; Case 70/83 Kloppenburg v Finanzamt Leer [1984] ECR 1075, paragraph 11; Case 325/85 Ireland v
7. Discretion implies different possible and reasonable interpretations of the rule by competent authorities. Different actors intervening at different moments in the project life cycle (project officers and auditors in the Commission, national bodies\(^{15}\), ECA auditors) may have their own understanding and different interpretations of the requirements, with the risk of making the beneficiaries liable to uncertain financial consequences (box 3). Moreover, when guidelines and examples are used to illustrate the room of discretion, these guidelines and examples should not be interpreted in such a way to limit the room of possible discretion.

\(^{15}\) For example, national ministries, national funders, supreme audit institutions (SAIs), as well as private audit firms.

Box 3 – Beneficiaries have the concern that they may face legal uncertainty

We organised workshops with legal experts, auditors and final beneficiaries on audit experiences in EU research and innovation programmes. The main concerns raised by beneficiaries are the following:

- when guidelines are too broadly defined, the use of examples by the Commission could be considered by some auditors as the only acceptable practice;

- when assessing compliance, auditors at multiple levels of the control chain need to interpret the context and the purpose of the same rules, which could be influenced by the availability of information;

- when beneficiaries use simplified cost options such as lump sum and flat rates, they expect that the auditors also adjust their approach;

- the European Commission has changed some articles of the Horizon 2020 Management Grant Agreements (MGA) with retrospective application to prior projects;

- various regulations (concerning Horizon 2020, the European Institute of Innovation and Technology (EIT)) do not always use the same definitions and principles.

Beneficiaries interest and EU interest

8. Beneficiaries have an interest in obtaining the reimbursement of their costs, whereas the EU focusses on the totality of the fund and the efficiency in allocating funds to individual beneficiaries. For beneficiaries such as universities, potential adverse effects of simplification on their revenue could lead to fear of and resistance to simplification, even if these effects turn out to be positive (box 4).
Box 4 – Beneficiaries fear an adverse financial impact

The use of simplified cost options such as flat rates, unit costs, lump sums and prizes could mean that some beneficiaries receive more or less funding, compared to status quo, even though on average the same amount is paid. Some participants have declared that they prefer their current (complex) system of real cost reimbursement, fearing a reduction in their funding even if simplified forms of cost reporting entail a lower administrative burden.

Regional spread and excellence

9. Excellence means supporting the best research projects at EU level, while regional spread aims to reduce discrepancies among geographical regions. In practice, some geographical regions are more successful than others in dealing with EU research and innovation programmes and in demonstrating their potential for achieving research excellence (box 5).

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19 EP/EPRS, EU framework programmes for research and innovation, evolution and key data from FP1 to Horizon 2020 in view of FP9 (September 2017 – PE 608.697), p. 32.
Box 5 – “Widening” is still an issue to overcome

We found that Knowledge and Innovation Communities (“KIC partners”) and funding contributions from the European Institute of innovation and Technology (EIT) are concentrated in a limited number of Member States. The EIT has created regional innovation schemes, an outreach mechanism to better promote innovation in specific regions, to spread its support more widely.

The dilemmas in perspective

10. Figure 1 summarises the dilemmas presented above. In the following sections, we try to analyse how these dilemmas have influenced the design of the regulatory framework, the funding model and the participation scheme.

Figure 1 – Dilemmas affecting the simplification of EU research programmes

Source: ECA, based on Horizon 2020 legislative framework.
**HORIZON 2020: A COMPLEX SYSTEM**

**Design of Horizon 2020**

11. We have pointed out that the overly complex legal framework in earlier Framework programmes could hinder the efficient implementation of the programmes. For Horizon 2020, there are two ways for removing unnecessary complexity in the design of programmes: rewriting the basic legal rules (“hard law”) guided by the principles of good administration and/or creating a simpler interface to adapt a complex system to the real life of researchers. Both are valid methods of keeping the right balance between the necessary bureaucracy and the researchers’ real life. Nevertheless, one thing is certain: simplification is complicated.

12. Compared with FP7, the structure of the set of basic regulations remained largely unchanged in Horizon 2020 (Annex IV), apart from the fact that the number of Specific

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20 ECA, special report 04/2016, paragraphs 86 and 102.


22 General principles that are related to the Right to good administration embedded in Article 41 of Charter of Fundamental rights of the EU and to the principle of an open, efficient and independent European administration enunciated in Article 298 TFEU: e.g. proportionality, fairness and equal treatment, legal certainty, seeking continuous improvement.

And Final conclusions and recommendations of the High Level Group on Simplification for post 2020, p. 1.


26 The rules of participation are laid down in (“hard law”) Regulation No 1290/2013 L 347/81 of 11 December 2013, laying down the rules for participation and dissemination in Horizon 2020 -
Programmes was reduced from four to one. However, the Commission has introduced several interfaces with the aim of facilitating the implementation of the basic regulations for beneficiaries (*figure 2*):

- the Model Grant Agreement (MGA);

- work programmes (multi-annual instead of annual work programmes) translating the objectives of the Specific Programme into detailed actions;

- a digital participant portal\(^{27}\).
13. The beneficiaries’ rights and obligations are laid down in the grant agreement. The Commission has developed a Model Grant Agreement (MGA) and an Annotated Model Grant Agreement as an online guide to applicants. In our 2016 annual report, we criticised the length of the guidance (a 750-page document)\(^{28}\). The Commission noted that under FP7 the same content was spread over several documents of more than 1 000 pages\(^{29}\).

14. The extensive use of examples in the guidance is helpful for beneficiaries when applying the rules. However, there is a risk that the perception of examples as the only possible

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\(^{28}\) ECA, 2016 Annual Report, Chapter 5, paragraph 5.18.

\(^{29}\) ECA, 2016 Annual Report, Chapter 5, paragraph 5.18 with Commission’s reply.
solution for all beneficiaries may limit the room of discretion for beneficiaries to adopt their own practices.

**Work programme**

15. The work programmes aim at translating the high-level objectives of the European Commission into specific actions. According to our 2015 annual report\(^{30}\), the audited actions are generally in line with the high-level objectives, but this may be due to the rather broad definition of these objectives. The work programmes are the basis for the experts to assess the Horizon 2020 application and to narrow down on the selection of projects in line with the objectives\(^{31}\).

**Participant portal**

16. The Commission offers an online participant portal as a single platform for the electronic management of applications and grants. The aim of this participant portal is to help applicants (for example, via the single helpdesk) to find detailed information on all processes, understand the parts of the legal framework of Horizon 2020 applicable to their specific situation and provide legal certainty for their actions\(^{32}\).

**Management of Horizon 2020**

**The Commission**

17. Horizon 2020 is directly managed by various EU entities, including eight Commission Directorates-General, four Executive Agencies (EA) and seven Joint Undertakings (\textit{table 1})\(^{33}\). According to the Commission, participants in the EU Framework Programmes before Horizon

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\(^{31}\) Workshop hosted in Brussels, by ECA with final beneficiaries for European Framework Programmes, 9 February 2015.

\(^{32}\) European Commission, Interim evaluation of Horizon 2020, p. 27 and 59.

\(^{33}\) The R&I family currently comprises of 8 DGs (AGRI, CNECT, EAC, ENER, GROW, HOME, MOVE and RTD), 4 EAs (EACEA, EASME, ERCEA, REA), 1 decentralised agency (GSA), and 7 JUs (BBI, Clean Sky, ECSEL, FCH, IMI, SESAR, Shift2Rail).
2020 complained about inconsistent treatment of the same issues by different Directorate-Generals or other implementing bodies\textsuperscript{34}.

**Table 1 – Numerous Directorates-General and other services are involved in managing Horizon 2020**

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<tbody>
<tr>
<td>Framework programme for research and innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of DG’s responsible</td>
<td>5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Number of Commissioners responsible</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Other entities responsible for implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Agencies</td>
<td>0</td>
<td>2 (ERCEA, REA)</td>
<td>4 (EASME, ERCEA, INEA, REA)</td>
</tr>
<tr>
<td>Art 187 initiatives</td>
<td>0</td>
<td>5 JTI’s (Artemis, ENIAC, FCH, CS, IMI) + SESAR</td>
<td>7 JUs (BBI, CS, ECSEL, IMI, FCH, S2R, SESSAR)</td>
</tr>
<tr>
<td>Public-to-public initiatives</td>
<td>1 Art 185</td>
<td>4 Art 185 initiatives</td>
<td>6 Art 185 initiatives</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>2 (EIB, EIT)</td>
<td>10 contractual PPPs</td>
</tr>
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*Source:* ECA, based on data provided by the Commission updated in February 2018.

**The unique role of the Common Support Centre (CSC)**

18. We\textsuperscript{35}, as well as beneficiaries\textsuperscript{36}, have called for consistent and uniform application of rules and coherent management of the Framework Programmes\textsuperscript{37}. We recommended


\textsuperscript{35} ECA, 2016 Annual Report, paragraph 5.15.

\textsuperscript{36} #Industry4Europa, October 2017, p. 11. LERU, KISS-Horizon 2020 -Keep it simple and straightforward (23 October 2015). Council (“Competitiveness”) conclusions 11-12 October 2010, p. 2.

\textsuperscript{37} ECA, Special Report No 2/2013: Has the Commission ensured efficient implementation of the Seventh Framework Programme for research? p. 27 paragraph 36.
further improvements, which led to the creation of the Common Support Centre (CSC)\(^ {38}\) \(^ {39}\). This was echoed by the interim evaluation of FP7 (2011) which highlighted the need to create a “Research Clearing Committee” to address legal uncertainty and different treatment of the same issues by different EU entities managing research grants\(^ {40}\).

19. We found that the Commission had improved its control systems, especially in recent years via its reinforcement of the ex-post audit function through the Common Audit Service (CAS), which is part of the CSC\(^ {41}\). Similarly, the Commission’s Internal Audit Service (IAS) has identified some good practices of coordination with the CSC for Horizon 2020 (\textit{box 6}).

Besides, the creation of the CSC was aimed at overcoming some of the incoherencies and inefficiencies in ex-post audits. As ex-post audits under FP7 were carried out by individual audit units of the different implementing services, there is a risk that beneficiaries could be subject to an incoherent approach and/or that the same beneficiary could be confronted with several overlapping audits\(^ {42}\).


\(^{39}\) ECA, 2016 Annual Report, paragraph 5.15 and annex 3.2.


\(^{41}\) ECA, 2016 annual report, annex 3.2, p.131.

\(^{42}\) Internal Audit Service (2017).
**Box 6 – The Internal Audit Service concluded positively on the coordination activities of the Fuel Cells and Hydrogen Joint Undertaking with the Common Support Centre**

In an audit completed in December 2017, the IAS found that the Fuel Cells and Hydrogen Joint Undertaking had put in place adequate governance, risk management and internal control processes that effectively and efficiently supported its coordination activities with the CSC and the implementation of CSC tools and services.

**Decision-making process**

20. Decision-making on the degree of simplification is complex and requires input not only from the Commission, but also from the co-legislators: the EP and the Council. In the past, the EP had for example expressed concerns about the proposed single rate for reimbursement and mandatory flat rate for indirect costs\(^43\)\(^44\), in contrary to our opinion\(^45\).

21. Similarly, the Council\(^46\), proposed the concept of additional remuneration for researchers (“bonus payments”) and re-established the Programme Committees for the selection of individual projects, leading to possibly longer time-to-grant.

22. In addition, we see a too limited actual timespan between the adoption of basic legal acts of a Framework Programme and its actual start\(^47\), even that the Commission’s proposals


\(^{47}\) For example, for the programming period 2014 – 2020 the date of adoption of the MFF was 2 December 2013, the date of adoption of the Commissions’ proposals of legislative acts was 30 November 2011 and the date of adoption of legislative acts was December 2013.
were presented to the legislators two years in advance in the case of Horizon 2020. This makes a thorough preparation of programme implementation difficult.

**FUNDING MODEL**

*Transition from FP6 to FP7 and Horizon 2020*

23. In our opinion on Horizon 2020 (2012), we observed that the new cost-funding model was “radically simplified”\(^\text{48}\). However, a significant part of Horizon 2020 is still based on the reimbursement of incurred costs. Simplified cost options, such as flat-rates financing and standard scales of unit costs are used in Horizon 2020 for a considerable part of the budget, while entitlement schemes like prizes and lump-sum project funding cover only a minor part. *Table 2* illustrates the use of prizes and *figure 3* presents the evolution of cost models in different Framework Programmes. We observed in our 2016 annual report\(^\text{49}\) that entitlement schemes are less error-prone than cost-reimbursements (as it is the case for personnel costs\(^\text{50}\)) for the overall budget. For entitlement expenditure, beneficiaries receive payment if they meet certain conditions.

**Table 2 – EU research and innovation programmes have made limited use of prizes**

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<tbody>
<tr>
<td>Prizes</td>
<td>None</td>
<td>below 0.1%</td>
<td>0.11% of total budget</td>
</tr>
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\(^{\text{(1)}}\) There were no prizes under FP6.

\(^{\text{(2)}}\) Under FP7, very small number of recognition prizes (e.g. DESCARTES Prizes), and a limited pilot action on inducement prizes in the Health Programme, as well as a “Woman Innovator Prize” at the end of FP7 were funded.

*Source:* ECA, based on the data provided by the Commission updated in January 2018.

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\(^{48}\) ECA, opinion No 6/2012, paragraphs 16 to 19.

\(^{49}\) ECA, 2016 annual report, box 1.4, paragraphs 1.10 and 1.38.

\(^{50}\) ECA, 2016 annual report, paragraph 5.9.
Lump-sum project funding

24. Lump-sum project funding means that a fixed amount will be paid when the pre-defined activities and/or output are completed. Lump-sum project funding removes obligations on cost reporting and financial ex-post audits for beneficiaries receiving EU funding. It has the potential to simplify the reimbursement of costs. The Commission is testing two pilot schemes under Horizon 2020. Firstly, the lump sum may be granted for a project as a whole, with the amount fixed in the call for proposals. Secondly, the lump sum may be calculated on the basis of a cost estimation provided by the beneficiary in the project proposal. Under these schemes, beneficiaries will receive the lump sum if there is sufficient assurance that they have executed the activities as described in the project plan.

25. On the basis of our annual Statement of Assurance audit work, we have analysed the setup of the scheme for lump-sum project funding in the area of research and consider that the scheme:

- could serve as a suitable funding model whose relative simplicity could encourage participation in particular of young researchers, SMEs and new entrants, in Horizon 2020.

- but could be more difficult to implement because it requires a change of mentality in the research community which, for decades, was used to working with cost-
reimbursement schemes. Furthermore, it calls for a change in the Commission’s approach to project selection, assessment, monitoring and evaluation.

26. The Commission is considering further enhancing the use of simplified cost options such as lump-sum project funding. This has so far been difficult due to the lack of appropriate performance information and criteria, as the results and the impact of research are by their nature difficult to predict and evaluate. They often do not follow a linear path\(^{51}\), and can occur long time after the moment of funding\(^{52}\). Nevertheless, the use of performance information and criteria is important to ensure EU added value in funded research projects, and to achieve policy objectives such as “excellence”, dissemination of results, and cooperation with industry.

*Acceptance of beneficiaries’ accounting practices*\(^{53}\)

27. Beneficiaries can have their own accounting systems and practices that are set up in accordance with national legislations and International Accounting Standards (IAS). Such legislations and standards may leave a certain margin of discretion for the beneficiaries’ cost-accounting methods. As a consequence, there is a risk that the beneficiaries’ methods for calculating and classifying cost items may not satisfy cost-eligibility criteria set by the EU Financial Regulation (FR) and the rules for participation in the research and innovation programme, even though these methods are recognised by, e.g., national funders. This has the effect that some participants have to invest in specific accounting tools when justifying certain cost items for Horizon 2020 funding, whereas they do not have to do so for other national funds.

28. Using beneficiaries’ usual accounting practices for audit purposes reduces beneficiaries’ costs. In this perspective, Horizon 2020 allows to a certain extent the usual accounting

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\(^{52}\) ECA, 2015 annual report, paragraph 3.31.

\(^{53}\) European Parliament, Conference of Committe Chairs, letter 21.3.2017 on the 2018 ECA Workprogramme, p. 4. ITRE proposed to assess “the use of national accounting systems [...] for simplification purposes”.
practice of beneficiaries\textsuperscript{54}. However, the Commission is cautious of fully accepting beneficiaries’ accounting practices because this would undermine the application of uniform rules for beneficiaries in all Member States. In addition, national control and audit systems do not, as a rule, check the costs incurred in EU projects under direct management. This is an obstacle for the Commission to cross-reliance on national audits.

\textit{Evolution of the error rate}

29. We identified a decrease of the error rates in our 2016 annual report Chapter “Competitiveness for growth and jobs” (from 5.6\% in 2014 to 4.4\% in 2015 and 4.1\% in 2016) (\textit{figure 4}). However, this decrease only gives limited information on the transition from FP7 to Horizon 2020, as:

- research and innovation spending only accounts for 59\% of all spending under the Chapter of “Competitiveness for growth and jobs”\textsuperscript{55};

- of the 92 transactions that we have audited in the area of research and innovation in 2016, 79 were from FP7 and only 13 from Horizon 2020; in 2015, only one Horizon 2020 transaction was selected in our sample.

- while we present our results on regularity on an annual basis, research programmes can take several years to complete; beneficiaries and the Commission can make adjustments throughout the entire period and at the final payment;

- the error rate is based on those errors that we have been able to quantify. There may be other observations, such as system weaknesses or failure to meet documentation requirements, which do not directly affect the regularity of the transactions we examined. These observations are taken into account in our statement of assurance (SoA) opinion but are by their nature not included in the error rate calculation.


\textsuperscript{55} ECA, 2016 annual report, box 5.1.
Figure 4 – Estimated level of error(%) “Competitiveness for growth and jobs” (2014 – 2016)

Source: ECA.

30. We found that most errors under FP7 stemmed from incorrect application of the eligibility rules, making simplification a possible instrument in reducing errors\(^56\). Although our information on the implementation of Horizon 2020 is limited\(^57\), as we have tested a small number of transactions, there are indications that the risk of irregularities in beneficiaries’ cost claims, in particular in relation to staff costs, remain present. In 2016, four out of thirteen Horizon 2020 transactions audited were affected by errors. Three were related to incorrectly declared staff costs, despite the introduction of simplified cost options and less stringent requirements concerning timesheets (table 3). Moreover, we identified

\(^{56}\) ECA, 2016 annual report, paragraph 1.10. For concrete examples see annex 5.2: overview of errors with an impact of at least 20 % for “Competitiveness for growth and jobs” (ECA, 2016 annual report).

\(^{57}\) We expect that more than half of our research sample for our 2018 annual report will relate to Horizon 2020 transactions.
the risk that beneficiaries could misinterpret the rules, especially those less familiar with the rules, such as SMEs and first-time participants\textsuperscript{58}.

**Table 3 – FP7/Horizon 2020 experiences 2016 annual report**

<table>
<thead>
<tr>
<th>Breakdown of 2016 annual report research sample</th>
<th>FP 7</th>
<th></th>
<th></th>
<th>Horizon 2020</th>
<th></th>
<th></th>
<th>Total</th>
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<tr>
<td></td>
<td>N\textsuperscript{o}</td>
<td>%</td>
<td></td>
<td>N\textsuperscript{o}</td>
<td>%</td>
<td></td>
<td>N\textsuperscript{o}</td>
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<tr>
<td>Transactions examined</td>
<td>79</td>
<td>100 %</td>
<td></td>
<td>13</td>
<td>100 %</td>
<td></td>
<td>92</td>
<td>100 %</td>
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<tr>
<td>Of which affected by quantifiable errors related to ineligible costs</td>
<td>33</td>
<td>41 %</td>
<td></td>
<td>4</td>
<td>30 %</td>
<td></td>
<td>37</td>
<td>40 %</td>
<td></td>
</tr>
<tr>
<td>Of which due to ineligible staff costs</td>
<td>18</td>
<td>23 %</td>
<td></td>
<td>3</td>
<td>23 %</td>
<td></td>
<td>21</td>
<td>23 %</td>
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</table>

*Source:* ECA.

**PARTICIPATION AND EXCELLENCE**

**Application rate, success rate and participation rate**

31. The application rate measures the number of applications submitted per Member State or per type of beneficiary group. The successs rate measures the number of funded applications in relation to the total number of submitted applications per Member State or per type of beneficiary group. The participation rate measures the actual funding received per Member State or per type of beneficiary group. Excellence is the overriding principle in Horizon 2020 and means that on the basis of competitive calls, only the best projects are selected.

**Geographical discrepancies**

32. With regard to the application rate, data from the Commission shows that the EU-15 Member States, except Luxembourg, had a higher number of Horizon 2020 applications during the first three years of the programme (2014-2016) than EU-13 Member States\textsuperscript{59}. However, for some EU-13 Member States, the application rate was higher than EU-15

\textsuperscript{58} ECA, 2016 annual report, paragraph 5.5.

Member States if the number of applications is compared with the number of research personnel in that Member State\(^{60}\).

33. With regard to the success rate, data from the Commission show that it ranges from 9 % to 18 % for Horizon 2020 applications depending on the Member States\(^{61}\). Ten out of the EU-15 Member States show the highest success rates for applications above the average of 14.8 % during the first three years of Horizon 2020. As shown in \textit{table 4}, although the average success rates per Member State has decreased in the recent framework programmes, the difference in success rates between EU-15 and EU-13 Member States persists.

\textbf{Table 4 – EU-13 Member States have lower success rates\(^{(a)}\) than EU-15 Member States\(^{62}\)}

<table>
<thead>
<tr>
<th>Country group</th>
<th>EU – 15</th>
<th>EU - 13</th>
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</thead>
<tbody>
<tr>
<td>\textit{FP 6}</td>
<td>25 %</td>
<td>20 %</td>
</tr>
<tr>
<td>\textit{FP 7}</td>
<td>22 %</td>
<td>18 %</td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>15 %</td>
<td>11.9 %</td>
</tr>
</tbody>
</table>

\(^{(a)}\)In relation to the number of applications.

Source: ECA, based on data provided by the Commission updated in February 2018.

34. The participation rate is a result of the application rate and the success rate. Data from the Commission show that EU-15 Member States receive around 87.8 % of the total funding from Horizon 2020 during the first three years of the programme (2014-2016), with Luxembourg and Portugal being the lowest (i.e. 0.3 % and 1.6 %, respectively), compared to

\(^{60}\) Idem, p. 13.

\(^{61}\) Idem, p. 20.

\(^{62}\) EU-13 refers to countries that have joined the EU since 2004, including Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia. EU-15 refers to Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.
around 4.9% for EU-13 Member States altogether. The remaining share of funding goes to non EU-28 countries. However, for some EU-13 Member States, the participation rate is higher than EU-15 Member States if the amount of funding is compared with the number of research personnel in that Member State. The interim evaluation of FP7 shows that the funding by Member State is not proportional to population or GDP.

**Discrepancies among beneficiary groups**

35. For beneficiary groups, public bodies account for around 60% of the total number of Horizon 2020 applications, whereas businesses submitted around 36% of the total Horizon 2020 applications. With regard to the success rate, businesses have a similar success rate in Horizon 2020 to that of educational establishments (13.5%), which is lower than the average success rate of all beneficiary groups (14.8%). Overall, businesses receive 27% of the Horizon 2020 funding during the first three years of the programme, whereas public bodies receive around 69%. The remaining share of funding goes to other entities (not public bodies or businesses).

**Widening actions and seal of excellence**

36. A selected group of Member States (i.e. EU-13 Member States, Luxembourg and Portugal) and associated neighbouring countries are eligible for the widening actions of the

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65 Idem, p. 29.

66 Interim evaluation of the Seventh Framework Programme, report of the Expert Group, final report 12 November 2010, section 5.3.


68 Idem, p. 19.


70 Idem, p. 24.
Commission. These actions aim to address the causes of low participation of these Member States in Horizon 2020 by providing additional support for policy design, institution and capacity building, improving communication and networking, and facilitating the necessary structural reforms. So far, the widening actions are designed to cover mainly public bodies for research and education in the selected countries, whereas private firms, including SME’s and first-time entrants are not directly included in the scope of these actions.

37. The seal of excellence is a high-quality label awarded to project proposals that meet the selection criteria but which are not awarded funding due to budgetary constraints. An estimate of €66.3 billion in additional funding would have been required to fund all proposals considered as being “excellent” so far\(^{71}\). The SME Instrument under Horizon 2020 was selected as the first candidate to implement the seal of excellence initiative, which aims to facilitate unfunded good proposals from SMEs to get access to funding from alternative sources, such as the European Structural and Investment Funds (ESI-F) managed by national authorities. According to figures from the Commission, 8,781 seal of excellence certificates have been awarded to SME Instrument project proposals that could not be funded under Horizon 2020.

**A CONTRIBUTION TO SIMPLIFICATION FOR RESEARCH BEYOND HORIZON 2020**

*Where can we identify simplification?*

38. In comparison with earlier research programmes, practitioners consider Horizon 2020 to be the best EU programme for research and innovation so far\(^{72}\). Various actors recognise the


considerable efforts towards simplification made by the Commission, and encourage further simplification\textsuperscript{73 \textit{74 \textit{75 \textit{76 \textit{77}}}}.}

39. Our analysis has identified the following areas with visible efforts of simplification:

- the improved accessibility of the basic legal regulations thanks to the creation of interfaces such as the Modal Grant Agreement (MGA), the work programme and the participants portal (\textit{paragraphs 12 to 16});

- the creation of the Common Support Center (CSC) and its role in simplification that has led the Commission to give the CSC a steering role in the roll-out of a single electronic grant management system across the Commission\textsuperscript{78} (\textit{paragraphs 18 to 19});

- the use of simplified cost options such as lump-sum project funding (\textit{paragraphs 24 to 26});

- more flexibility in the reporting of costs, such as the partial acceptance of beneficiaries’ usual cost-accounting practices (\textit{paragraphs 27 to 28}).

\textsuperscript{73} EC, Reflection Paper on future of EU finances, COM(2017) 358, 28 June 2017, paragraph 4.2.3.


\textsuperscript{76} Draft Council conclusions 5940/18 ADD1 (p. 12) on 2016 Discharge procedure, chapter 5 “Competitiveness for growth and jobs”, p. 12.

\textsuperscript{77} Opinion European Economic and Social Committee (EESC) on Mid-term evaluation Horizon 2020, section 5.1 and 5.4 (INT/792), paragraphs 5.1 and 5.4.

\textsuperscript{78} Operational conclusions of the Commission’s Corporate Management Board (CMB) meeting of 26/10/2016.
40. However, in the context of the inherent dilemmas described in this briefing paper, simplification remains difficult in the following areas:

- the basic regulations remain difficult to comprehend for participants, especially those who are less familiar with the rules, such as SMEs (paragraphs 11 to 16 and 30);

- the implementation of simpler funding options remains difficult for the beneficiaries (e.g. need to adapt their cost-accounting practices), as well as the control of them by the auditors (e.g. lack of audit evidence); besides, there is no robust evidence to prove a link between simplification efforts and the quantifiable error rate, yet (paragraphs 27 to 30 and boxes 3 and 4);

- the success rate for applications has fallen in successive research programmes; EU - 13 Member States are lagging behind EU - 15 Member States (paragraphs 33 and table 4).

41. According to the High Level Group on research programmes: “Horizon 2020 has achieved remarkable simplification” and the advice is to “simplify further”80. Our audit experience with regard to simplification shows the need to follow the line of reducing the burden for beneficiaries, aligning rules with their usual practices recognised by national funders, optimising the Commision’s management processes, and adopting a more risk-driven approach for control activities, where justified81. In addition, we recommend that simplified cost options such as unit costs, lump sums, flat-rate financing and prizes be taken further into account in order to reduce legal uncertainty.82

79 The independent High Level Group on maximising the impact of EU research and innovation programmes published its report LAP-FAB-APP (July 2017).


81 ECA, Special Report No 2/2013.

82 ECA, 2016 annual report, paragraph 5.31.
Proposals for simplification beyond Horizon 2020

42. Our analysis shows that attention is needed in the following areas, taking into account our prior special reports and opinions:

Proposal 1 (stability and change) – the need to provide a reasonable timespan between adoption and implementation of legal acts\textsuperscript{83} \textsuperscript{84}

- the relevant actors like the Commission and beneficiaries need sufficient time to adjust to new legal framework, based on the principles of good administration (\textit{paragraphs 4, 11 and 20 to 22}).

Proposal 2 (accountability and ownership) – the need to assess the further use of simplified cost options such as lump sum project funding and prizes \textsuperscript{85} \textsuperscript{86} \textsuperscript{87}

- the further use of simplified cost options should be assessed in order to encourage wider participation from all types of beneficiary groups (such as SMEs and new entrants), based on more appropriate performance criteria (\textit{paragraphs 5 and 24 to 26}).

\textsuperscript{83} Special Report No 2/2017: The Commission’s negotiation of 2014-2020 Partnership Agreements and programmes in Cohesion, executive summary paragraph X, figure 3, paragraphs 36 to 37, paragraphs 138 to 139, recommendation 1.

\textsuperscript{84} Special report No 1/2004: on the management of indirect RTD actions under the fifth framework programme (FP5) for research and technological development (1998 to 2002), together with the Commission’s replies (2004/C 99/01), summary VI.

\textsuperscript{85} 2016 Annual Report, paragraph 5.31, recommendation 1.

\textsuperscript{86} Special report No 2/2013 “Has the Commission ensured efficient implementation of the seventh framework programme for research?”, recommendation 5.

Proposal 3 (legal certainty and discretion) – the need to explain the use of guidelines as non-binding rules

- the application of interfaces, such as guidelines, as supplementary to legal regulations should not hinder the discretion for individual practices (paragraphs 6 to 7 and 11 to 16).

Proposal 4 (beneficiaries’ interest and EU interest) – the need to further align programme provisions with beneficiaries’ accounting practices

- the acceptance of beneficiaries’ accounting practices needs to be furthered in line with the new Financial Regulation, and where justified, it needs to be based on the work of others, such as certification by competent national authorities. (paragraphs 8 and 27 to 28).

Proposal 5 (Regional spread and excellence) – the need to recognise validated good research proposals under Horizon 2020 in other European and national programmes following a proper coordination mechanism

- the evaluation and selection of good research proposals for Horizon 2020 needs to be recognised within other EU policies, such as cohesion policy, in order to avoid unnecessary

88 Special Report No 2/2013 “Has the Commission ensured efficient implementation of the Seventh Framework Programme for research?” summary III, paragraphs 26, 31 and 34.

89 Special Report No 2/2013 “Has the Commission ensured efficient implementation of the Seventh Framework Programme for research?” summary VI (a) paragraphs 21 to 22, recommendation 1.

90 Special Report No 2/2013 “Has the Commission ensured efficient implementation of the Seventh Framework Programme for research?” summary VI (b) and (c), figure 5, paragraphs 31 to 34, recommendations 2, 3 and 4.


duplication of work among Commission services in line with the one-stop-shop approach, and to ensure overall process efficiency in the allocation of EU funds (paragraphs 9, 33, 35 and 37).
The ECA’s work on EU Framework Programmes for Research and Innovation

- ECA 2015 and 2016 annual and specific reports¹.

- ECA Special Reports:
  
  • Special Report No 4/2016: the European Institute of Innovation and Technology must modify its delivery mechanisms and elements of its design to achieve the expected impact.
  
  • Special Report No 2/2013: has the Commission ensured efficient implementation of the Seventh Framework programme for research?
  
  • Special Report No 2/2010: the effectiveness of the design studios and construction of new infrastructures support schemes under the Sixth Framework programme for research.
  
  • Special Report No 8/2009: Networks of excellence and integrated projects in Community research policy: did they achieve their objectives?
  
  • Special Report No 1/2004: the management of indirect RTD actions under the fifth framework programme (FP5) for research and technological development (1998 to 2002)

- ECA opinions:
  
  

¹ [https://www.eca.europa.eu](https://www.eca.europa.eu)
ANNEX II

List of workshops and conferences attended by ECA staff


2. Symposium “Auditing is listening” Audit principles and audit standards: their origins, connections and consequences, 2 July 2015, ECA, Luxembourg.


4. ECA workshop, Theoretical framework on Legal Uncertainty on Final beneficiaries of EU subsidies, 11 March 2016, Brussels.


7. ITRE Working Group on Horizon 2020: "Simplification and Accounting system: flat rate vs. full costs / cooperation with the European Court of Auditors", 8 December 2016, Brussels.


12. Informal stakeholder meeting on simplification of the future Framework Programme (FP9), European University Association (EUA), 11 October 2017, Brussels.


15. Stakeholder’s workshop on further simplification of implementation of R&I Framework Programmes, 20 October 2017, Brussels.

16. Visit of the director of the Common Support Centre (DG RTD) to ECA, 15 November 2017, Luxembourg.
ANNEX III

Overview of significant simplifications introduced since FP5

FP5-FP6

- Introduction of the online Electronic Proposal Submission Service (EPSS) for the submission of proposal and development of electronic tools
- Introduction of audit certificates
- Introduction of the collective financial responsibility of project partners
- Adoption of an Action Plan on Rationalisation and Acceleration whose main actions were: diminution of the time to contract, clarification of the rules, improvement of information, improvement of internal management

FP6-FP7

- Clarification of the legal framework with the adoption of a general grant agreement instead of a general contract
- Reduction of the reporting burden by an increase of the standard duration of project reporting periods (18 instead of 12 months)
- Extension of the two stages submission of project proposals

Funding model

- Abolition of the “additional cost” model (that did not allow universities to charge personnel costs for permanent staff)
- Adoption of a “simplified method” for the calculation of indirect costs for beneficiaries which do not have a full cost accounting system
- Lump sum for International Cooperation Partner Countries (ICPC) countries

Audits & Controls

- Introduction of ex-ante certification on costing methodology for average personnel costs (CoMAv)
- Improvements to the system of audit certificates (agreed upon procedures for the certifying auditors and introduction of the “Certificate on Financial Statements (CFS))

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1 ECA, based on Commission (February 2018).
- Substantial reduction in the number of CFS by introducing a minimum threshold (€375 000) requirement for a CFS
- Adoption of guidelines for checking the financial viability of applicants – providing for equal treatment and increased legal certainty. Creation of a URF (unique registration facility) to permit participants to submit their basic legal, administrative and financial information only once. This task has been delegated to the Research Executive Agency
- Creation of the Guarantee Fund, allowing a reform of the system of ex-ante controls and the suppression of bank financial guarantees
- Adoption of three measures to simplify the management of EU FP7 research grants (average personnel costs, flat rate for SME owners, creation of the Research Clearing Committee) (C(2011) 174 final 24/01/2011 (published on the participant portal)
- Simplification of the recovery process, clarification of the eligibility of taxes and charges linked to remuneration (C(1720) 12/12/2009 (published on the participant portal)
- Commission Decision on the use of flat rates to cover subsistence costs incurred by beneficiaries during travel carried out within grants for indirect actions, concluded under the Seventh Framework Programme of the European Community (2007 - 2013) and the Seventh Framework Programme of the European Atomic Energy Community (Euratom) (2007 - 2011)

**FP7-H2020**

**Funding model**

- Radically simplified funding model:
  - A single funding rate per project, replacing the complex matrix of funding rates by organisation categories and activity types under FP7
  - A single flat rate (25 %) covering indirect costs, replacing the four options for indirect costs under FP7

**Audits & Controls**

- Reduction of the number of ex-ante financial capacity checks: only private coordinators are checked (none of the other partners, whose risks are covered by the guarantee fund)
- Further significant reduction in the number of CFS (only one per beneficiary per project at the end, and only if the contribution based on actual costs and unit costs calculated in accordance with the usual cost accounting practices of the beneficiary is at least €325 000).
No more obligation of work time recording for staff working 100% on the project, simplified time recording for staff working partially on the project

One central EU audit service for research and innovation spending with one single audit strategy for all implementing bodies; audit period after project closure reduced from 5 to 2 years

**Intellectual Property Rights (IPRs)**

- Easier transfer of IPR with less intervention by the Commission (Horizon 2020 Rules for participation, Article 44)

**Communication / IT**

- Participant Portal: a single gateway for all exchanges between beneficiaries and implementing bodies managing Horizon 2020 grants and for experts
- E-management: fully paperless management of grants and expert contracts; automatic paperless document storage and archiving

**Time-to-grant (8 Months)**

- No-negotiation approach
- Acceleration of administrative processes
### Basic legislation and guidelines for Framework Programmes

<table>
<thead>
<tr>
<th>Document type (number, pages)</th>
<th>Programming period</th>
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<tr>
<td><strong>Legal basis</strong></td>
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<tr>
<td>- Specific Programmes</td>
<td>3 Specific Programmes (total: 73 pages)</td>
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<td><strong>Legal documents for</strong></td>
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<td>implementation</td>
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<tr>
<td>- Work Programmes</td>
<td>(18 doc, 994 pages)</td>
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<td>- Model grant agreement(s)</td>
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<tr>
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<td>About the Grant</td>
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**Source:** ECA, based on Commission (February 2018).