

# 2019

# Annual Activity Report

**European  
Research Council  
Executive Agency**

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# THE ERC AND ITS AGENCY IN BRIEF



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In 2019, the ERCEA achieved excellent budget execution results: 100% for the operational budget and 99.9% for the operating budget. It signed 1 098 new grant agreements, the biggest number since its inauguration.

2019 was also a year of important change in ERC leadership. First, significant turnover occurred in the agency's senior management team, marked by the arrival of a new director and two heads of units stepping up to fill in as acting department heads. Second, the former ERC President, Professor Jean-Pierre Bourguignon, finished his mandate as representative of the ERC Scientific Council at the end of the year.

The ERC Starting, Consolidator, Synergy and Proof of Concept calls were implemented following the agency's planning. The last processes to finalise the ERC 2019 Advanced Grant call are still ongoing. A novelty in this year's ERC Synergy call was that the applying small teams of principal investigators could include one colleague who is not based in a European or Associated Country host institution. 22% of the applying researcher teams made use of this option. The US was most prominently presented in the applications and winning proposals as a third country. The ERC Scientific Council decided to open this possibility of third country participation in the ERC Synergy calls because they believe in the truly global nature of frontier science.

The agency has closely followed the discussions on and preparations for the next Framework Programme, Horizon Europe. It anticipates continuity in its mission to serve the scientific community by funding the highest quality frontier science in Europe. Agency representatives have participated and continue to participate in the many DG Research & Innovation working groups that prepare the implementation of Horizon Europe. To this end, a new meeting format was contrived, too. Two ERC Scientific Council representatives, the DG Research & Innovation Common Implementation Centre director and the ERCEA director meet four times per year to discuss strategic directions concerning programme implementation with each other.

The agency's annual conference had the theme "Frontier research: Pathways to Sustainability". 20 high-level researchers funded by the ERC came to Brussels and presented their work in five fascinating and interdisciplinary sessions. The conference was followed by a high-level policy event, "A Sustainable Future for Europe – the Contribution of Frontier Research", in which Commissioner Mariya Gabriel spoke for the first time in her new role as the Commissioner for Research, Innovation, Culture, Education and Youth.

In 2019, the ERCEA celebrated the 10th anniversary of its administrative autonomy. A staff-led organising team devised an original and festive evening event composed of congratulatory words by the Commissioner (per video message), the Director-General of DG Research & Innovation and the ERC President.

After release of the 2018 staff survey results, the agency's HR team organised participatory sessions to learn more about the staff's concerns and hear about their ideas on how to improve the ERCEA work environment. The management team analysed this information and developed elements for a follow-up action plan that builds on of five priority areas: securing proper information flows, involving staff in decision-making, addressing underperformance, maintaining the ERC spirit while being open to change and career possibilities.

## EXECUTIVE SUMMARY

This Annual Activity Report is the ERCEA acting Director's management report to the College of Commissioners. Annual Activity Reports are the main instrument of management accountability within the Commission and constitute the basis on which the College takes political responsibility for the decisions it takes as well as for the coordinating, executive and management functions it exercises, as laid down in the Treaties<sup>1</sup>.

### a) Highlights of the Year

During 2019, the agency continued monitoring the output and impact of the ERC frontier research funding: since 2007 and by December 2019, ERC-funded projects have produced more than 157 000<sup>2</sup> scientific publications of which 7%<sup>3</sup> are among the top one percent most highly-cited publications worldwide, well above the ERC target of 1.8%. This confirms the consistent scientific impact of the outcome from ERC supported research.

Two studies<sup>4</sup> were finalised in 2019, one on the impact of ERC funding on researchers' careers and the other on open access to publications and research data; they provide evidence for the success of the ERC Scientific Council's strategy. 71% of Starting and Consolidator Grant principal investigators who completed ERC projects experienced upward career mobility between being awarded and completing the grant. ERC funded research is published in open access outlets at a rate higher than 70%, which defines the ERC as a global leader among research funders.

The agency provided support to the Scientific Council regarding its planning for ERC implementation under Horizon Europe and provided input and support to the Commission (in particular to the Common Implementation Centre) during the institutional negotiations of Horizon Europe as well as with regards to the Horizon Europe Implementation Strategy. In addition, it supported the Scientific Council in the establishment of the last Horizon 2020 (H2020) Annual Work Programme (ERC WP 2020).

As examples of external policy feedback activities, ERCEA participated in DG Research & Innovation's Artificial Intelligence (AI) Matrix Task Force contributing to the inventory of H2020 projects in AI and in providing information about the latest AI-related projects funded in ERC calls. Also, the agency provided feedback to DG CNECT regarding ongoing ERC projects which could be relevant for the future communication on quantum technologies.

Last but not least, ERCEA was instrumental in organising a very special press conference where EU-funded scientists unveiled the first ever image of a black hole. The support of a 2013 ERC Synergy Grant allowed three European researchers to take the lead in the large-scale international research collaboration 'Event Horizon Telescope' that led to this first image of a black hole. The research confirmed the predictions of Albert Einstein's General Theory of Relativity and has opened up new lines of inquiry in universe science. Said Brussels press conference was synchronised with five other press conferences around the globe and received exceptional media attention<sup>5</sup> (the live video on YouTube, the tweet with the image of the black hole and Instagram post were the most successful content ever published by the European Commission).

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<sup>1</sup> Article 17(1) of the Treaty on European Union.

<sup>2</sup> Result of end of August 2019.

<sup>3</sup> This number refers to the prizes/awards and other forms of recognition at end of August 2019 which are recorded in ERC internal data systems, taken from reporting by ERC grantees and public records.

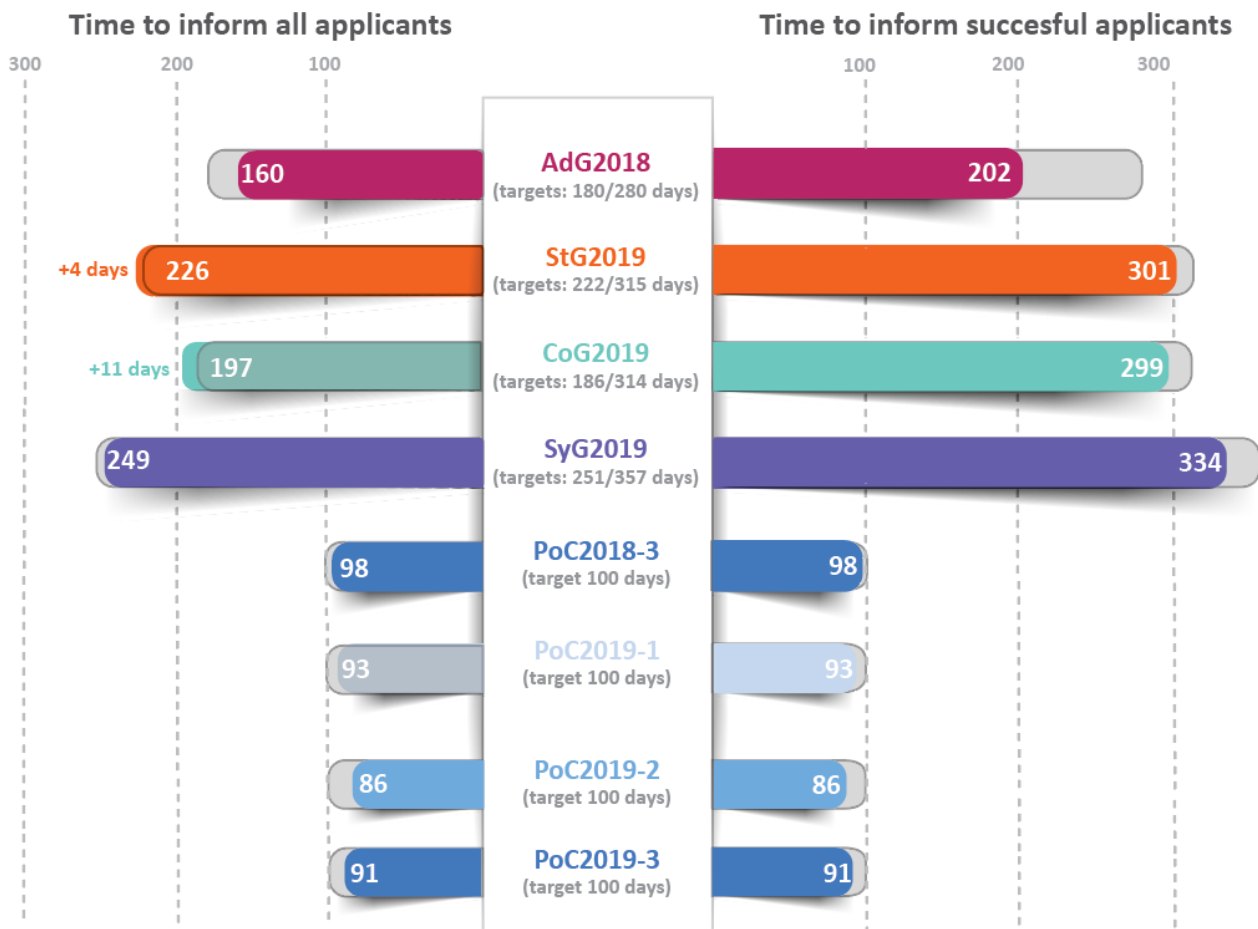
<sup>4</sup> Planned and financed under ERC 2016 Work Programme.

<sup>5</sup> YouTube video from the press conference has been viewed 3.1 million times and approximately one thousand media articles mentioned the ERC, while covering the news.

## b) Key Performance Indicators (KPIs)

The results of ERCEA 5 key performance indicators, together with their targets, reflect 2019 Annual Work Programme.

### 1. Time to Inform

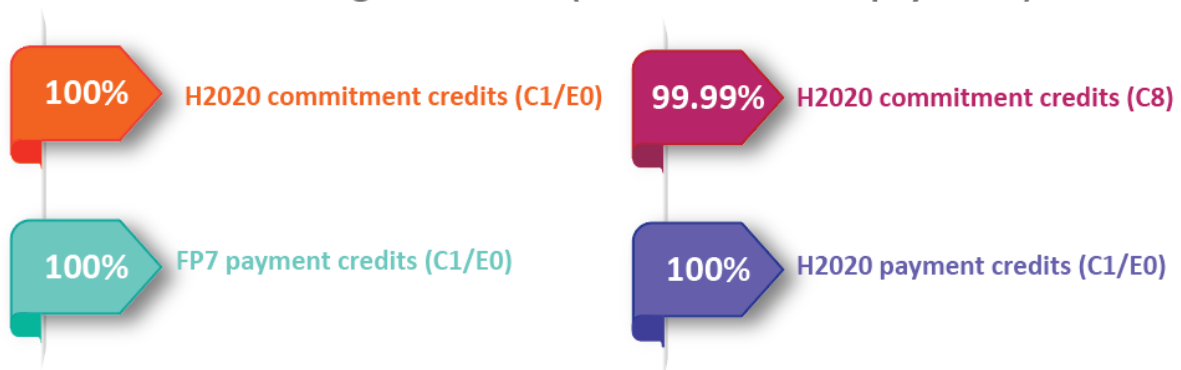


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(Source of data: COMPASS)

### 2. Budget execution:

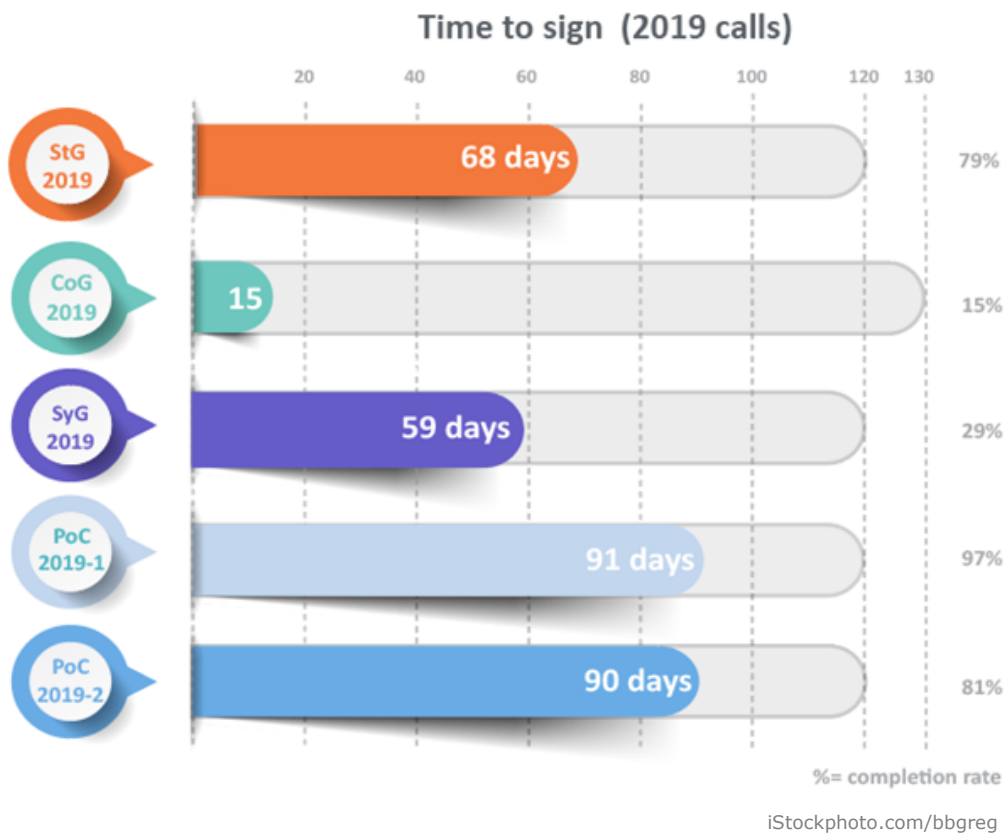
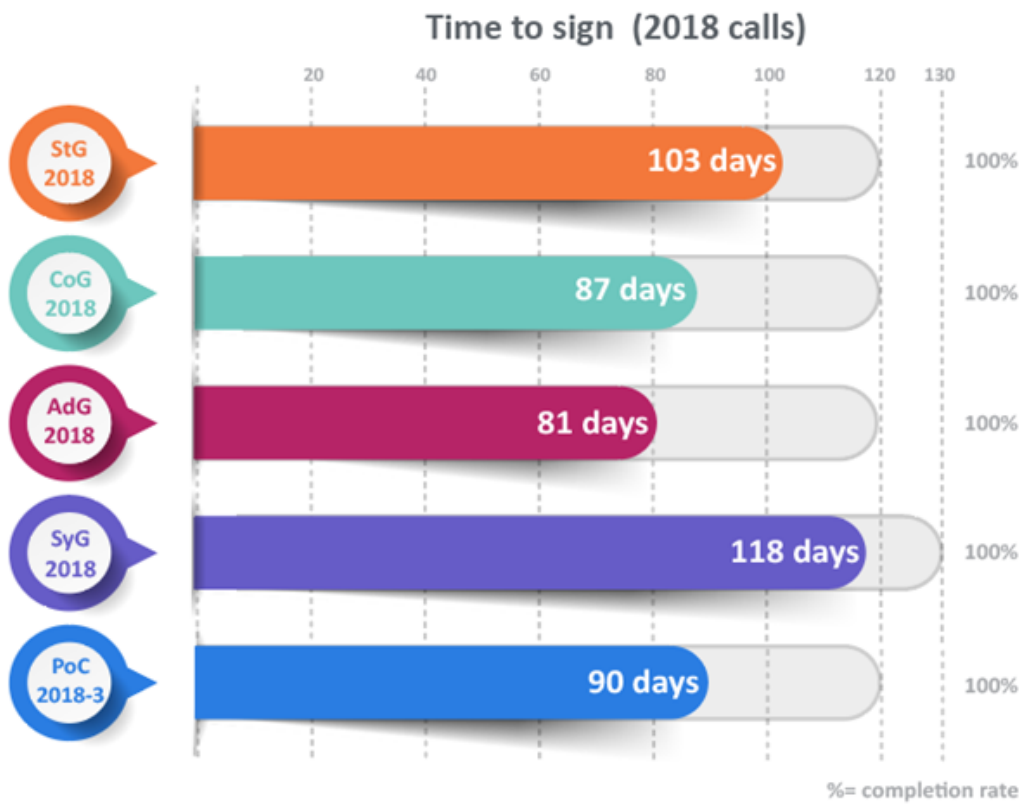
#### Budget execution (commitments and payments)



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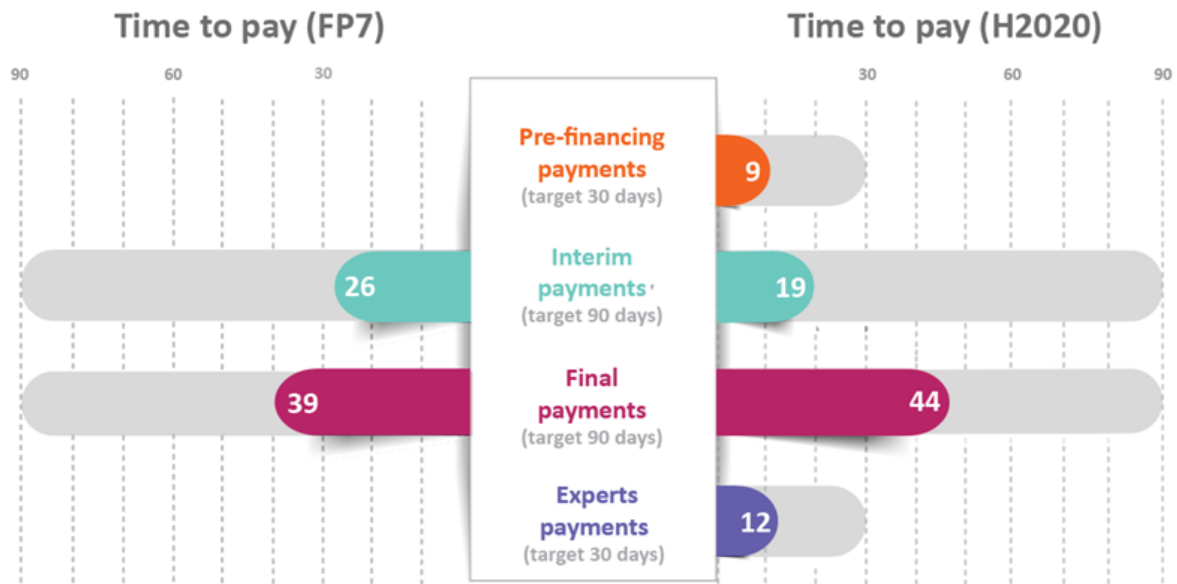
(Source of data: ABAC Data Warehouse)

### 3. Time to Sign:



(Source of data: COMPASS)

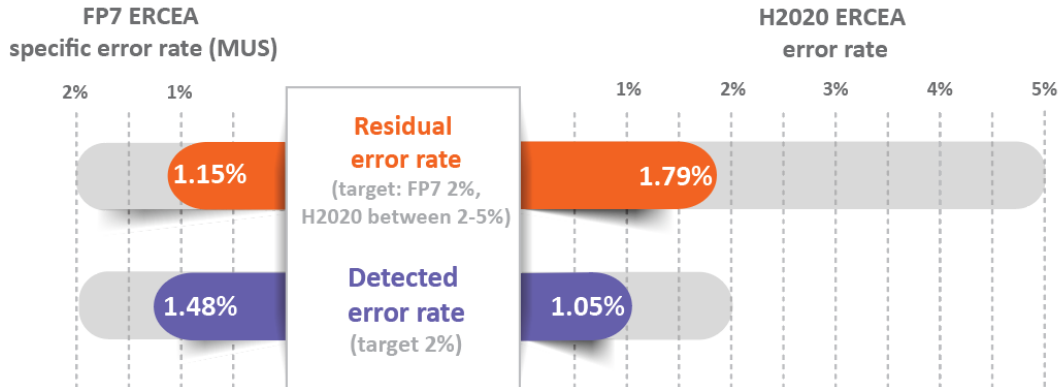
4. Time to Pay:



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(Source of data: ABAC Data Warehouse)

5. Error rates:



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(Source of data: CAS for H2020, Internal follow-up tool + AUDEX + CORDA for FP7)

Only two minor deviations<sup>6</sup> of the "Time To Inform all applicants" are noted but they do not challenge the efficiency of the call management process.

For H2020, the residual error rate of 1.79% is based on the sample of the Research Family participations, while the detected one of 1.05% is based on a sample of ERCEA participations only.

<sup>6</sup> Mainly due to the tight call calendar.



## **c) Key conclusions on Financial management and Internal control**

In accordance with the governance arrangements of the European Commission, ERCEA conducts its operations in compliance with the applicable laws and regulations, working in an open and transparent manner and meeting the expected high level of professional and ethical standards.

To ensure the achievement of policy and management objectives, the Commission has adopted a set of internal control principles, based on international good practice. The financial regulation requires that the organisational structure and the internal control systems used to implement the budget be set up in accordance with these principles. ERCEA has assessed the internal control systems during the reporting year and has concluded that the internal control principles are present and functioning. Some areas for improvement identified in 2018 (with no impact on the declaration of assurance), have been addressed in 2019. Please refer to AAR section 2.1.3 for further details. In addition, ERCEA has systematically examined the available control results and other indicators, as well as the observations and recommendations issued by the Internal Audit Service and the European Court of Auditors. All these elements have been assessed together to determine their impact on management's assurance about the achievement of the control objectives. Please refer to Section 2.1 for further details.

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended, risks are being appropriately monitored and mitigated, and necessary improvements and reinforcements are being implemented. The acting Director, in his capacity as Authorising Officer by Delegation for the operational budget and as Authorising Officer for the operating budget has signed the Declaration of Assurance.

## **d) Provision of information to the Commissioner**

In the context of the regular meetings during the year between the Director and DG Research & Innovation on management matters, the main elements of this report and assurance declaration have been brought to the attention of DG Research & Innovation's Director-General, who has taken these into consideration in his reporting to Commissioner Moedas (until 1<sup>st</sup> December 2019) and to Commissioner Mariya Gabriel, responsible for Research, Innovation, Culture, Education and Youth. Similarly, these elements have been reported to ERCEA's Steering Committee.

# 1. IMPLEMENTATION OF ERCEA'S 2019 ANNUAL WORK PROGRAMME – HIGHLIGHTS OF THE YEAR

## ERC's Specific Objectives and Result Indicators – FP7 and H2020

Reflecting the two tier-structure of the European Research Council, the ERC Scientific Council establishes annually its Work Programme, which is subsequently adopted by the Commission. It defines the specific objectives and result indicators disclosed below. These derive from the general targets of the FP7 "Ideas" Specific Programme and H2020 Specific Programme and from the Commission's policy objectives in the area of research which may be found in the related legal basis and in the 2016-2020 Strategic Plan of DG RTD. These objectives and indicators are reflected in the ERCEA Annual Work Programme, too, in order to connect the ERC Scientific Council's strategy and the corresponding ERCEA implementation objectives. The latter are reported in more detail below.

The fundamental activity of the ERC, both under FP7 and H2020, is to provide substantial, five-year long<sup>7</sup> funding to researchers - and their research teams - working in Europe to pursue ground-breaking frontier research that will primarily contribute to advancing the frontiers of knowledge. ERC-supported researchers are selected on the basis of the most ambitious research ideas and their previous achievements, covering all areas of knowledge from the Physical Sciences and Engineering to Life Sciences, Social Sciences and Humanities. Awards are granted solely based on scientific quality with no predetermined priorities, targets or quotas. The level of the competition guarantees distinction (success rates ranging from 10% to 16% depending on the grant schemes<sup>8</sup>). Being awarded an ERC grant is synonymous with scientific excellence for the worldwide scientific community.

This explains the high number of international prizes awarded to FP7 ERC grant holders – more than 1 800<sup>9</sup> in the period 2009-2019 which already exceeds significantly the target of 200 by year 2020. Likewise, in 2019<sup>10</sup>, FP7 ERC-funded projects have produced more than 157.000 scientific publications, an increase of 34% compared to year-end 2018. In addition, the share of publications from ERC-funded H2020 projects which are among "the top 1% most highly cited"<sup>11</sup> worldwide, namely 7%<sup>12</sup>, is a clear indication of the ERC grantees' research performance.

In 2019, a number of ERC funded studies produced scientific breakthroughs and earned important recognitions, to mention a few:

- The Nobel Prize in Physiology or Medicine<sup>13</sup> awarded jointly to William G. Kaelin Jr, Sir Peter J. Ratcliffe and Gregg L. Semenza. Sir Peter J. Ratcliffe was Co-Principal Investigator of an ERC Advanced Grant 2008.
- Several of the researchers involved in the first direct detection and image of a black hole were supported through an ERC Synergy Grant. The announcement of the discovery draw the world's attention.

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<sup>7</sup> The Synergy call boosts 6-years long funding and the Proof of Concept – 1.5-years.

<sup>8</sup> Excluding the Proof of Concept scheme.

<sup>9</sup> This number refers to the prizes/awards and other forms of recognition at end of August 2019 which are recorded in ERC internal data systems, taken from reporting by ERC grantees and public records.

<sup>10</sup> Last results available are from August 2019.

<sup>11</sup> Related tables are shown in annex 12.

<sup>12</sup> Exceeding by far the H2020 target of 1.8%, result at 30.08.2019

<sup>13</sup> <https://www.nobelprize.org/prizes/medicine/2019/summary/>

## ERC funding instruments and H2020 2018 and 2019 Calls for Proposals

The European Research Council Executive Agency contributed in 2019 to achieving the Commission's general objective "*A new boost for Jobs, Growth and Investment*" as well as DG Research & Innovation's specific objective related to the implementation of H2020<sup>14</sup>. By providing opportunities to non-EU researchers supported by foreign agencies to visit ERC research teams<sup>15</sup> and broadening participation of outside-ERA researchers – through opening ERC Synergy teams to allow including up to one top researcher working anywhere on the globe<sup>16</sup> - the ERCEA also contributed to the DG's "*open to the world*" priority.

In 2019, the ERCEA implemented the H2020 specific objective "Strengthening Frontier Research through the activities of European Research Council" of part I "Excellent Science" of the H2020 Specific Programme<sup>17</sup>, through the five calls for proposals shown below:

Call identifier	Opening date	Closing date	Indicative n° of outputs	Output 31/12/19 <sup>18</sup>
ERC-2019-StG – Starting Grant	14/09/2018	17/10/2018	390	323
ERC-2019-CoG – Consolidator Grant	24/10/2018	07/02/2019	314	46
ERC-2019-AdG – Advanced Grant	21/05/2019	29/08/2019	166	On-going
ERC-2019-SyG – Synergy Grant	14/09/2018	08/11/2018	48	11
ERC-2019-PoC – Proof of Concept	16/10/2018	1) 22/01/2019 2) 25/04/2019 3) 19/09/2019	167	1) 55 2) 54 3) 0

The original call planning including the evaluation of the submitted proposals was strictly respected. All proposals selected for granting under the 2018 calls were signed in the course of 2019 (if not already signed in 2018).

The number of retained proposals for funding (main list and reserve list proposals) of the 2019 calls met the ERC and ERCEA Work Programmes' targets<sup>19</sup>. The evaluation of the 2019 Advanced Grant call was still ongoing at the time of writing, and results will be available later in 2020.

<sup>14</sup> Namely specific objective 1.3 of DG Research & Innovation Strategic Plan 2016-2020: *To ensure an effective and efficient implementation of Horizon 2020 and other Research & Innovation programmes and maximise synergies.*

<sup>15</sup> Cf. implementing arrangements with key funded bodies and science ministries of the United States, Korea, Argentina, Japan, China, South Africa, Brazil, Canada and Mexico. Two new ERC Implementing Arrangements have been signed by ERCEA in 2019 with Australia and Singapore. More information on that under the "ERC teams open to the world section": <https://erc.europa.eu/funding-and-grants/funding-schemes/other-erc-opportunities>.

<sup>16</sup> By the means of communication actions organised by ERCEA or by joining parent DG's campaigns.

<sup>17</sup> Cf. Council Decision 2013/743/EU of 3/12/2013 establishing the specific programme implementing Horizon 2020 – The Framework Programme for Research & Innovation (2014-2020) (OJ L347, 20/12/2013).

<sup>18</sup> Completion rate: StG 79.2%; for CoG 14.5%; for PoC 54.8% and for SYG 28.9%.

Please refer to Annex 12 for the reserve list proposals selected for funding.

<sup>19</sup> Targets provided under annex 12.

<b>Relevant general objective: A new boost for Jobs, Growth and investment</b>		<b>Parent DG: DG RTD</b>	
<b>RTD Specific objective: To ensure an effective and efficient implementation of Horizon 2020 and other RTD programmes and maximise synergies</b>		<b>Related to spending programme: H2020</b>	
<b>ERC Specific objective: Excellent Science – European Research Council (ERC) – Strengthening frontier research<sup>20</sup></b>		<b>Related to spending programme: H2020</b>	
<b>Main outputs in 2019:</b>			
<b>Outputs</b>	<b>Indicators</b>	<b>2019 Targets</b>	<b>2019 Results</b>
Launch of calls for proposals <sup>21</sup>	% of calls for proposals successfully launched according to agreed deadlines	100 %	100%
Evaluation of calls	% of 2019 calls evaluated in 2019 % of 2018 calls evaluated in 2019	100% of 4 2019 calls <sup>22</sup> 100% of 1 2018 call <sup>23</sup>	100% for 2019 (AdG 2019 Step 2 will be completed in early 2020) 100% for 2018 (AdG 2018 completed)
Grants signed in 2019	Proposals selected under 2018 calls granted in 2019	100% <sup>24</sup>	100%

Thus, as evidenced above, the Strengthening Frontier Research part of H2020 spending programme managed by the ERCEA is on course to meet their respective multiannual objectives and has achieved the annual performance indicators or outputs and milestones.

## 1.1 H2020 “Strengthening Frontier Research” and the FP7 “Ideas” programmes implementation

Further to the introduction of the Proof of Concept pilot “lump sum” grant in the 2019 ERC Work Programme, the implementation required adaptation of existing grant implementation processes and procedures as well as related IT tools. For lump sum grants, the EU contribution is paid to the beneficiary regardless of the costs actually incurred, provided the scientific work has been performed in accordance with the description of work. A thorough assessment on the effectiveness of the lump sum pilot will be performed once the related grant implementation cycle will be fully completed. The first final payments are expected in 2021.

As regards the Synergy grant, the ERC Work Programme 2019 introduced the possibility for one Principal Investigator (PI) to be hosted by a Host Institution outside of the EU or the Associated Countries.

<sup>20</sup> The ERC Specific objective (provided by Article 3 of Council Decision 2013/743/EU of 3/12/2013) has been included by DG Research & Innovation, the parent DG, into the following global specific objective: *To ensure an effective and efficient implementation of Horizon 2020 and other Research & Innovation programmes and maximise synergies* whilst the relevant general objective is: *A new Boost for Jobs, Growth and Investment*.

<sup>21</sup> Some ERC 2019 calls were launched in 2018 further to the adoption of the ERC WP 2019 by the Commission in July 2018.

<sup>22</sup> Namely ERC–2019 StG–Starting Grant, ERC–2019 CoG–Consolidator Grant, ERC–2019 SyG – Synergy Grant and ERC–2019 – PoC – Proof of Concept.

<sup>23</sup> Namely ERC-2018-AdG – Advanced Grant.

<sup>24</sup> Covering all successfully concluded grants e.g. excluding terminations, withdrawals etc.

In 2019, the agency signed 1 098 new grants, supported by an operational commitment budget of around € 2.02 billion.

The Time to Sign result improved in 2019 for most of the grant schemes, thanks to the effective management of the agency operations and resources, and to the progressive simplification of processes and procedures related to the granting activity.

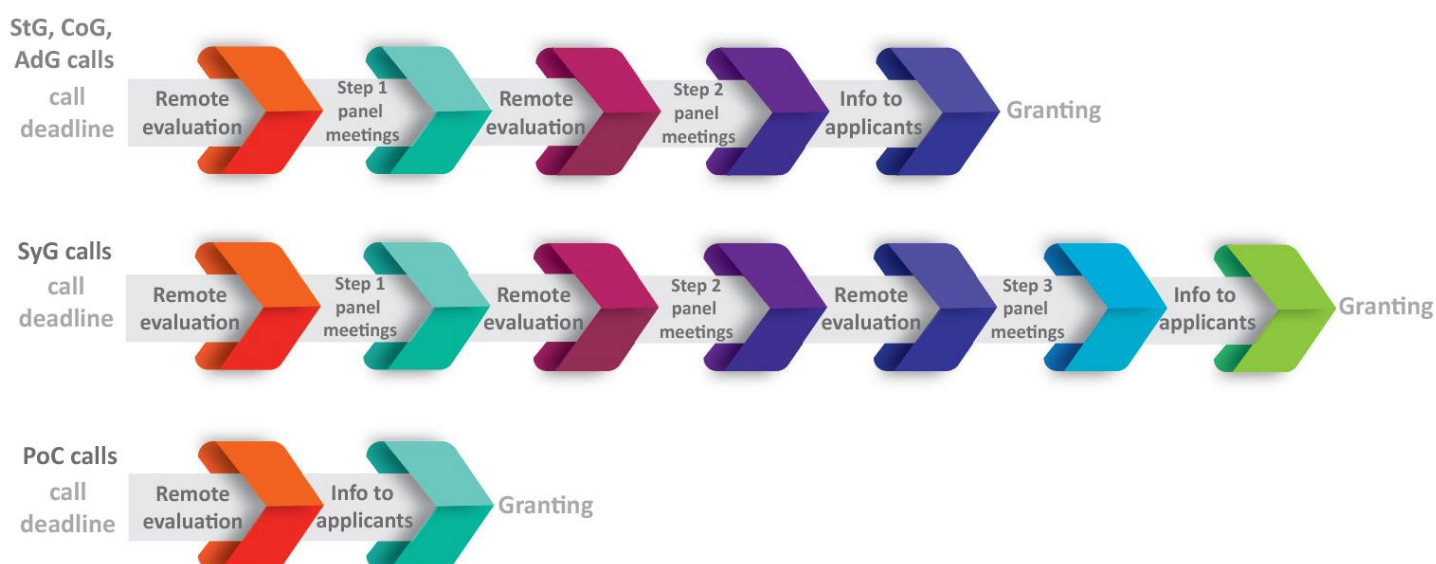
In addition, the overall increase of 7% of payments related to FP7 legacy and H2020 as well as the scientific and financial management of a portfolio of more than 6 000 funded projects<sup>25</sup> was achieved efficiently.

The Time to Pay also show some efficiency gains obtained, for example, by the introduction of a simplification of the final payment report template requested to the Common Implementation Centre (CIC), further to the User Satisfaction Survey.

Finally, the agency was closely collaborating in various working groups of the European Commission preparing the model grant agreement for the Horizon Europe (HE) Framework Programme (2021-2027), the proposal evaluation and submission forms, HE reporting and the key impact pathways.

### 1.1.1 Implementation of H2020 calls for proposals financed under the 2019 budget commitment appropriations

#### Evaluation processes

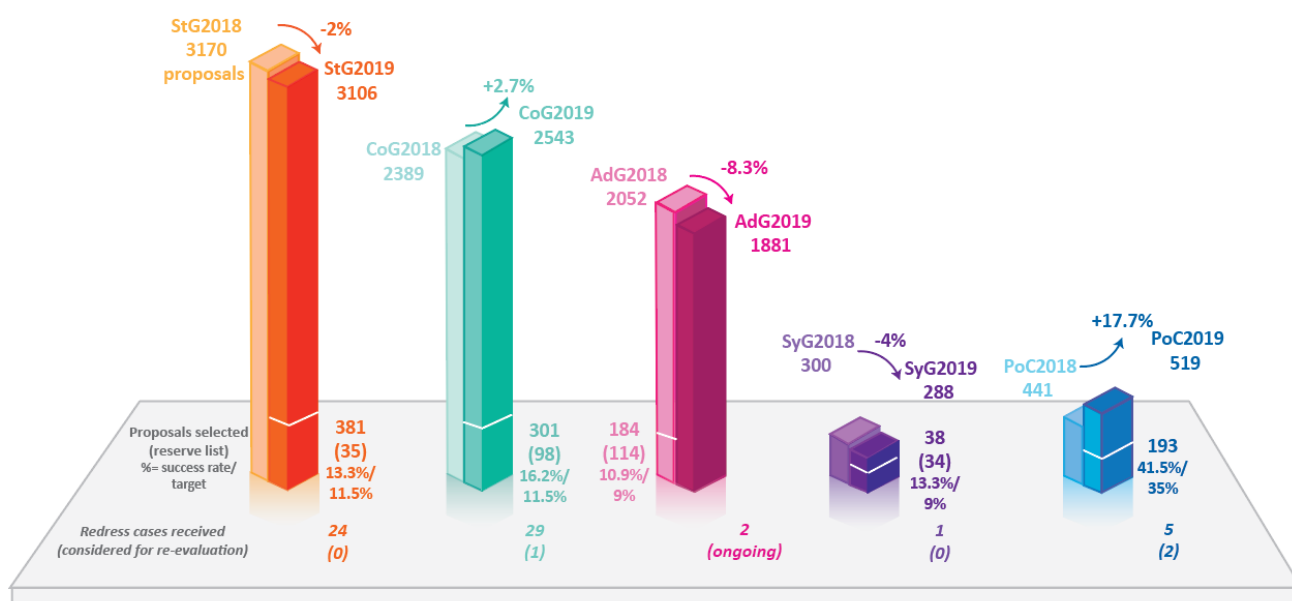


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Overall, in response to the 2019 calls a total of 8 247 proposals were submitted (StG+CoG+AdG+SyG+PoC), a decrease of 1.3% in submissions compared to 2018.

<sup>25</sup> 21% being funded under FP7 and 79% under H2020.

% increase/decrease of submissions to 2019 calls and selected proposals



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Accumulated experience shows that, after the resubmission rules were stabilised since 2016, the number of submitted proposals for StG, CoG and AdG fluctuates within the interval  $\pm 5\%$  every year, thus the agency defined the yearly target of submissions<sup>26</sup> to an increase by 5%. In 2019, the agency experienced a significant decrease of the number of Advanced Grant proposals, explained by the fact that the Synergy Grant call attracted many principal investigators with an Advanced Grant profile. The 2020 Synergy Grant call closed on 5 November 2019 with a remarkable application increase of 53.1%<sup>27</sup>, indicating the attractiveness of this funding scheme for the scientific community.

The 2019 commitment credits<sup>28</sup> for a total amount of € 2.02 billion were booked on basis of the ERC Financing Decision, since the evaluation process of the Advance Grant 2018 calls was not yet concluded.

Altogether, 489 grants related to the 2019 ERC calls were signed for a total amount of € 692.17 million. The granting activity for the 2019 calls having started in late 2019 (in line with the call calendar), reached the following completion rates: for StG 79.2%; for CoG 14.5%; for PoC 54.8% and for SyG 28.9%.

Furthermore, 609 grants and their budgetary commitments originating in the 2018 ERC calls for proposals were signed during 2019, in particular: 56 for StG, 242 for CoG, 222 for AdG, 65 for PoC as well as 24 for SyG, completing the granting of 2018 calls.

The following table shows the results of the evaluation of the H2020 2018-2019 calls, including signed grants and pre-financings paid in 2019.

<sup>26</sup> The agency follows a similar logic to set the PoC expected submitted proposals.

<sup>27</sup> Compared to the Synergy call 2019.

<sup>28</sup> Covering commitments voted for the year and EFTA ones (C1/EO).

## Implementation of calls in 2019 <sup>29</sup>

Calls implemented in 2019	Call deadlines		Indicative budget (€ Mio)	Number of proposals				Grants signed during 2019		Preparation failed	Of which pre-financing paid € Mio
	Opening dates	Closing dates		Submitted proposals	Ineligible (% of submitted proposals)	Main list – invited (not reserve)	Success rate	Number	€ Mio		
ERC-2018-StG – Starting Grant	03/08/2017	17/10/2017	581	3 170	1.1%	388	13.5%	56	84		53 (31.9 M)
ERC-2018-CoG – Consolidator G	24/10/2017	15/02/2018	550	2 389	1.2%	280	11.7%	242	473.6	1	230 (180.4 M)
ERC-2018-PoC – Proof of Concept	06/09/2017	1)16/01/2018 2)18/04/2018 3)11/09/2018	20	1) 119 2) 132 3) 190	1) 0.8% 2) 0.8% 3) 6.3%	1) 50 2) 50 3) 60	1) 42.0% 2) 37.9% 3) 31.6%	65	9.7		64 (7.7 M)
ERC-2018-SyG – Synergy Grant	03/08/2017	14/11/2017	250	300	1%	27	9.2%	24	230.9		24 (92.4 M)
ERC-2018-AdG – Advanced Grant	17/05/2018	30/08/2018	450	2 052	1.1%	184	9.0%	222	539.3		182 (176.2 M)
ERC-2019-StG – Starting Grant	14/09/2018	17/10/2018	580	3 106	1.0%	381	12.3%	323	490.5	1	102 (62 M)
ERC-2019-CoG – Consolidator G	24/10/2018	07/02/2019	602	2 453	1.1%	301	12.3%	46	88.2		
ERC-2019-AdG – Advanced Grant	21/05/2019	29/08/2019	391	1 881	2.3%	On-going					
ERC-2019-SyG – Synergy Grant	14/09/2018	08/11/2018	400	288	1.0%	38	13.2%	11	97.1		
ERC-2019-PoC – Proof of Concept	16/10/2018	1)22/01/2019 2)25/04/2019 3)19/09/2019	25	1) 137 2) 131 3) 251	1) 2.2% 2) 0.8% 3) 4.8%	1) 55 2) 62 3) 76	1) 40.1% 2) 47.3% 3) 30.3%	109	16.4		85 (10.2 M)

<sup>29</sup> Results in light grey were already reported in the 2018 AAR, while those in light orange refer to 2019.



## 1.1.2 Implementation of H2020 and FP7 calls financed under previous year's budget (2007-2013)

The following table provides an overview on the implementation of calls charged to previous year's budget, highlighting the volume of ERCEA in terms of grant preparation, pre-financing, interim and final payments.

Calls	Running projects 01/01/2019		Grants signed in 2019		Payments made in 2019		Projects closed in 2019		Running projects 31/12/2019	
	Number	Open balance Mill. €	Number	Mill. €	Number	Mill. €	Number	De- commitments Mill. €	Number	Open balance Mill. €
<b>FP7</b>										
StG	581	78.83	-	-	430	47.3	374	10.1	207	21.4
CoG	305	125.66	-	-	392	82.7	79	0.8	226	42.2
AdG	598	129.59	-	-	444	74.1	339	12.7	259	42.8
PoC	-	-	-	-	-	-	-	-	-	-
SyG	23	61.64	-	-	15	30.3	2	0.7	21	30.6
<b>Total FP7</b>	<b>1507</b>	<b>395.72</b>	<b>--</b>	<b>-</b>	<b>1281</b>	<b>234.4</b>	<b>794</b>	<b>24.3</b>	<b>713</b>	<b>137</b>
<b>H2020</b>										
StG	1867	1569.09	379	574.5	1375	581.6	9	4.4	2237	1557.6
CoG	1358	1418.63	288	561.8	1021	565.4	7	3.4	1639	1411.6
AdG	966	1191.60	222	539.3	728	485.1	1	0.8	1187	1245
PoC	376	14.85	174	26.1	376	26.9	213	1.1	337	12.9
SyG	3	27.27	35	328	27	103.3	-	-	38	252
<b>Total H2020</b>	<b>4570</b>	<b>4221.45</b>	<b>1098</b>	<b>2029.7</b>	<b>3527</b>	<b>1762.3</b>	<b>230</b>	<b>9.7</b>	<b>5438</b>	<b>4479.1</b>
<b>Grand total</b>	<b>6077</b>	<b>4617.17</b>	<b>1098</b>	<b>2029.7</b>	<b>4808</b>	<b>1996.7</b>	<b>1024</b>	<b>38.6</b>	<b>6151</b>	<b>4616.1</b>

Source of data: ABAC Data Warehouse



Each financial year, the agency processes grant agreements and budgetary commitments (so-called C8 credits) from the calls of the previous year and proceeds with the global commitments (per call - under C1 credits) and the granting for the calls of the given year as soon as the evaluation results become available.

Overall, 1 098 Grant Agreements were signed in 2019, totalling to € 2 029.68<sup>30</sup> million; € 1 337.51 million for projects selected in the 2018 calls (representing 609 grants<sup>31</sup>). The related C8 credits linked to L1 (global) commitments for the 2018 calls reached 100% execution by means of L2 (individual) commitments. 489 grants related to the 2019 calls were signed for an amount of € 692.17 million. The granting activity for the 2019 calls having started in the summer of 2019 and reached the following completion rates: StG 79.2%; CoG 14.5%; PoC 54.8% and SyG 28.9%.

4 808 payments<sup>32</sup> were carried out in 2019 (vs. 4 451 in 2018), representing an increase of 8% compared to 2018. 3 527 payments related to H2020 and 1 281 to FP7.

In line with the programme's maturity, H2020 payments related mainly to interim payments (2 177 vs. 1 676 in 2018) for an amount of € 938.4 million. 1 147 were pre-financing payments (vs. 1 127 in 2018) summing up to € 818.2 million and 203 final payments (vs. 142 in 2018) summing up to € 5.7 million.

Payments related to FP7, worth a total of € 234.35 million, concerned mainly final payments (805 vs 787 in 2018) and interim payments (475 vs. 718 in 2018), respectively worth € 119.42 million and € 114.91 million.

At year-end, the total ERCEA grant portfolio of both FP7 and H2020 programmes counted a total of 6 151 running grant agreements, including 713 for FP7 worth € 137 million and 5 438 grants for H2020 worth € 4 479.1 million.

Throughout 2019, 6 802 expert payments were processed representing a moderate increase of 6.34 % in comparison with 2018 (6 396).

### 1.1.3 Amendments to grant agreements

During 2019, 1 141 new amendments were requested (958 for H2020 and 183 for FP7) by beneficiaries and 910 amendments were signed, which represents an overall decrease of about 16.3 % for the two programmes compared to year end 2018.

The highest number of amendments for H2020 in 2019 concerned the Starting Grants, followed by the Consolidator Grants. Most of the H2020 amendments dealt with modifications of Annex 1 (action description) and changes of Annex 2 (estimated budget), whereas FP7 amendments were mostly related to modifications of the grant duration and changes of the authorised representative (as in 2018).

In 2019, the number of amendments linked to a modification of the grants' duration has seen a large decrease of 60%. The total number of cases registered in 2019 for FP7<sup>33</sup> (111) are in contrast with the numbers for H2020<sup>34</sup>, for which the number of cases registered has increased with 59% in 2019 (207 vs. 130 in 2018).

The number of requests for the transfer of the grant agreement for a change of Host Institution (portability) has decreased by 64% for FP7 grants and increased by 57% for H2020 grants compared to 2018, reflecting the maturity of the programmes. Portability is mostly exercised in the early stage of project implementation. Also, 19 grant

<sup>30</sup> Corresponding number of grants, please refer to the table under 1.1.2.

<sup>31</sup> In particular: 56 for StG, 242 for CoG, 222 for AdG, 65 for PoC as well as 24 for SyG.

<sup>32</sup> Expert payments not included.

<sup>33</sup> Regarding the FP7 grants, the agency further applied the extension rules decided by ERCEA Board and communicated to the beneficiaries in 2014.

<sup>34</sup> Regarding H2020, a higher flexibility was implemented as to the acceptance of the extension requests, including to the cases linked to maternity, parental illness leaves of team members.

terminations have been registered<sup>35</sup>, mostly triggered by moves of the principal investigators to third countries.

### **1.1.4 Implementation of ERCEA operating budget**

The administrative budget for 2019 was initially adopted on 13 December 2018 for a total amount of € 51 327 500 and it was subsequently amended<sup>36</sup> once and modified four times by the ERCEA Steering Committee and the Director's decisions on budget line re-allocations.

The budget amendment was adopted by the Steering Committee on 24 September 2019, in the framework of the Global Transfer Exercise. This first amendment encompassed the return of € 213 000 to DG Research & Innovation, an amount that was reserved for a contribution to the SUMMA IT Tool (SUMMA will replace ABAC), which was finally paid by the parent DG. After re-evaluating all budget lines in early September, the additional amount needed summed up to € 190 340. Consequently, the total amended budget for 2019 amounted to € 51 517 840.

The budget calculation was based on realistic scenarios on all budget items, including the assumption of a 1.7% salary indexation. The agency had also taken the opportunity to further fine-tuning several budget lines.

The administrative budget structure remained largely consistent with the ones from previous years with the staff expenditure representing 78,77% of the budget whereas costs for the building, ICT and other operating expenditure represented 16,33% and the programme management expenditure represented 4,9%.

In total, with one amendment and four modifications, the agency stayed within the internal indicator allowing six budget modifications/transfers per year and reached a budget execution of 99.99% in commitment credits.

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<sup>35</sup> 2 cases for FP7 (4 in 2018) and 17 for H2020 (12 in 2018).

<sup>36</sup> The possibility to give back credits or ask for additional credits, the overall amount of the budget change.

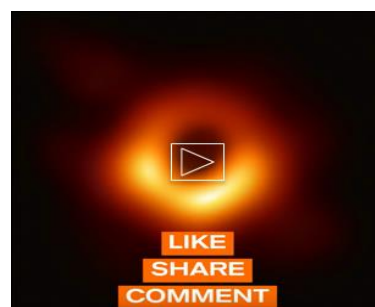
## 1.2 Example of EU-added value of ERC funded projects

The ERC's inception in 2007 introduced a pan-European competition that attracts applications from leading researchers. The striking scientific value of ERC projects is confirmed by a new 2019 independent study<sup>37</sup> showing that 79.9% of ERC projects were of major impact: 18% led to a breakthrough and 61.9% to a major scientific advance. Almost half of the projects have already left their mark on the economy, society and policy-making, whilst around three quarters are foreseen to do so in the medium- and long-term. The analysis confirms previous results, with even a slight increase in overall impact compared to the latest 2018 study.

The following are just a few examples of ERC projects which produced breakthrough scientific results, published during 2019<sup>38</sup>:

### First image of a black hole

Scientists funded by the ERC (Heino Falcke, Michael Kramer, Luciano Rezzolla) have captured the first-ever image of a black hole, finally confirming the existence of a phenomenon that, though widely accepted, has never been directly observed before. The ERC provided a total of € 44.3 million over the last 15 years to the Event Horizon telescope. Other EU national governments, including Netherlands, Sweden, the US, Canada, Mexico, Japan, and Taiwan also contributed.



### Ocean sustainability at risk

The lack of empirical and theoretical evidence on how fisheries' socio-ecological systems should adapt to climate change opens the opportunity to enter a new field of research. ERC grantee, Prof. Elena Ojea (grant "CLOCK") addresses these challenges in Europe and elsewhere providing evidence for decision-makers. She contributed to a technical document on scientific discoveries related to the expected impacts of climate change on the sustainable ocean economy that she presented to the Conference of the Parties of Climate Change (COP25) in December 2019.

### Decoding the puzzle of fertility

The link between age and fertility in women is a code we need to crack. This is especially true in a society where parents want children later in life. Collaboration between two ERC grantees (grant "ChromOocyte", Melina Schuh, and grant "ReCAP", Eva Hoffmann) brought new insights into the physiological changes that cause infertility. They used super high-resolution cameras to capture the microscopic structures of meiosis, the cellular process through which, in women, eggs form.



<sup>37</sup> to be published soon on <https://erc.europa.eu/news/>

<sup>38</sup> Copyright for pictures © [www.istockphotos.com](http://www.istockphotos.com) ; more details on ERC stories can be found on the annual report on the ERC activities and achievements in 2019, <https://erc.europa.eu>

### 1.3 Evaluation of the ERCEA operations

In the last quarter of 2018, DG Research & Innovation initiated the third 3-year evaluation of ERCEA operations, in line with the obligations set in Article 25(1) of Council Regulation (EC) N° 58/2003 laying down the statute for Executive Agencies.

The evaluation covered the period from mid-July 2015 to mid-July 2018 and focused on the agency's effectiveness, efficiency and economy. The final evaluation report was presented to the Steering Committee (on 22 February 2019), sent for comments to Commission services (inter-service consultation in July 2019) and is pending for adoption by the Commission. Once adopted, it will be transmitted to the European Parliament, the Council and the Court of Auditors.

The evaluators issued 3 recommendations (1) on the selection of ERC panel members (addressed to the Scientific Council and to ERCEA), (2) on ethics supporting guidance and awareness among beneficiaries (addressed to ERCEA) and (3) on the need of further define the policy feedback role and business process (addressed to the Commission services). The action plan for the implementation of these recommendations and related deadlines should be communicated by DG Research & Innovation.

Overall, the evaluation found that the delegation of the ERC programme to the ERCEA was fully justified with major cost savings generated and value added. The actual savings of the executive agency scenario were higher than the 2013 estimates when compared to hypothetical management by the Commission services (in-house scenario). ERCEA was effective in achieving its objectives relating to the programme implementation mandate and supporting the ERC Scientific Council in a timely and high quality manner. Both Scientific Council members and external stakeholders were highly satisfied with the agency's performance.

The ERCEA was found to be one of the most efficient and cost-effective Executive Agencies in the 2015-2018 period, building on its strong performance also from 2012-2015.

## 2. ORGANISATIONAL MANAGEMENT AND INTERNAL CONTROL

This section explains how the ERCEA delivered the achievements described in the previous section. It is divided into two subsections.

The first subsection reports the control results and other relevant information that supports the management's assurance on the achievement of the financial management and internal control objectives<sup>39</sup>. It includes any additional information necessary to establish that the available evidence is reliable, complete and comprehensive. It covers all activities, programmes and management modes relevant to the agency.

The second subsection deals with the other components of organisational management: human resources, better regulation principles, information management and external communication.

### 2.1 Financial management and internal control

Assurance is an objective examination of evidence for the purpose of providing an assessment of the effectiveness of risk management, control and governance processes.

This examination is carried out by management who monitors the functioning of the internal control systems on a continuous basis, and by internal and external auditors. The results are explicitly documented and reported to the acting Director. These are:

- Management reports on control results;
- The contribution of the Head of Unit in charge of Risk Management and Internal Control (RMIC), including the results of internal control monitoring at the agency, in particular the reports on recorded exceptions, non-compliance events and any cases of 'confirmation of instructions' (Art 92.3 FR);
- The ERCEA reports of the ex-post audits results for FP7;
- The CAS reports of the ex-post audits results for H2020;
- The limited conclusion of the Internal Auditor on the state of control;
- The observations and recommendations reported by the Internal Audit Service (IAS);
- The observations and the recommendations reported by the European Court of Auditors (ECA).

These reports stem from a systematic analysis of the evidence available. This approach provides sufficient guarantees regarding the completeness and reliability of the information reported and results in a complete coverage of the budget delegated to the ERCEA's acting Director.

This section is for reporting the control results and other relevant elements that support management's assurance. It is structured into (a) Control results, (b) Audit observations and recommendations, (c) Effectiveness of internal control systems and (d) Conclusions on the assurance.

#### 2.1.1 Control results

This section is for reporting and assessing the elements identified by management, which support the assurance on the achievement of the internal control objectives<sup>38</sup>. The ERCEA's assurance building and materiality criteria are outlined in AAR Annex 4. Annex 5

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<sup>39</sup> Art 36.2 FR: a) effectiveness, efficiency and economy of operations; b) reliability of reporting; c) safeguarding of assets and information; d) prevention, detection, correction and follow-up of fraud and irregularities; and e) adequate management of risks relating to the legality and regularity of underlying transactions, taking into account the multiannual character of programmes as well as the nature of payments concerned.

outlines the main risks together with the control processes to mitigate them and the indicators used to measure the performance of the relevant control systems.

<b>Operational and administrative payments 2019</b>							
		<b>Payments made<sup>40</sup></b>				<b>Total administrative Expenditure (€)</b>	<b>% of total (admin/operational)</b>
		<b>Pre-financing (€)</b>	<b>Payments against cost statements (€)</b>	<b>Experts' payments (€)</b>	<b>Total operational expenditure (€)</b>		
<b>2019</b>	FP7	0	234 456 757.32	0	234 456 757.32	<b>51 037 473</b>	<b>2.5%</b>
	H2020	818 399 057.21	944 909 800.90	14 701 163.65	1 778 010 021.76		
	Total	818 399 057.21	1 179 366 558.22	14 701 163.65	2 012 466 779.08		

Source of data: ABAC Data Warehouse

The H2020 and FP7 programmes are implemented under direct management mode. The final available payment budget for H2020 of € 1 731.08 million and for FP7 of € 219.19 million in voted credits<sup>41</sup> was fully consumed. Payment transactions for operational expenditures consist of pre-financing, interim and final payments as well as regularisation payments. Usually, a grant agreement of five years is financed by a pre-financing, paid at the start of the project, followed by three interim payments and one final payment.

In 2019, 58.60%<sup>42</sup> of the total amount executed were payments against cost statements, while the remaining 41.40%<sup>43</sup> of payments were pre-financing and expert payments, both assessed as low risk transactions in regard to the control objective related to the legality and regularity of underlying transactions. Also, out of all 2019 payments against cost statements, 19.88% related to FP7 and 80.12% to H2020, compared to 29,56% for FP7 and 70,44% for H2020 at year-end 2018.

The 2018 Financial Regulation introduced additional reporting requirements in the Annual Activity Report, which are presented hereafter:

- **Case of 'confirmation of instructions' (new FR art 92.3)**

No case was reported.

- **Cases of financing not linked to costs (new FR art 125.3)**

The H2020 ERC Model Grant Agreement uses a combination of actual costs, unit costs and flat rates (a combination of Article 125.1(b), (c) and (e) FR).

In addition to actual costs, the ERC MGA provides by default for:

Flat rates for indirect costs:

- 25% of direct costs (Article 5.2(a) of the MGA, Article 29 RfP).

Unit costs:

- Personnel costs of SME owners and natural persons not receiving a salary (Article 5.2(a) Commission Decision C(2013)8197);
- Personnel costs calculated in accordance with the beneficiary's usual cost accounting practice: Average personnel costs (Article 5.2(a) MGA, Article 33 H2020 RfP);

<sup>40</sup> The figures in this table include all types of credits (fund sources), like the voted credits and assigned revenue.

<sup>41</sup> Commitments voted for the year and EFTA ones (C1/EO).

<sup>42</sup> In 2018, 56.67% of the total amount executed concerned payments against cost statements, while the remaining 43.33% payments executed concerned pre-financings and expert payments.

<sup>43</sup> 43.33% of payments executed concerned pre-financings and expert payments in 2018.

- Costs of internally invoiced goods and services calculated in accordance with the beneficiary's usual accounting practices (Article 5.2(d) MGA).

A specific H2020 Model Grant Agreement is used for pilots with lump-sum project funding. In 2019, for the first time in the agency, a call for proposals (PoC-2019) used a lump-sum fixed ex-ante.

- **Cases of flat rates >7% for indirect costs (new FR art 181.6)**

According to the Horizon 2020 Rules for Participation, indirect eligible costs of Horizon 2020 grants shall be determined by applying a flat rate of 25% of the total direct eligible costs. It is not a Commission decision, but the basic act that derogates from the Financial Regulation in this case. This applies to all Horizon 2020 grants, although in some cases the 25% could be directly embedded within a unit cost (e.g. unit cost for clinical studies).

- **Derogations from the principle of non-retroactivity pursuant to Article 193 of the Financial Regulation**

Four grant agreements signed in 2019 derogate<sup>44</sup> from the principle of non-retroactivity pursuant to Article 193 of the Financial Regulation.

### 1. Effectiveness

In order to be considered effective, controls are expected to meet the internal control objectives (detailed hereafter) and for each of those control, objectives result in benefits.

- **Legality and regularity of the transactions**

ERCEA is using internal control processes to ensure the adequate management of the risks relating to the legality and regularity of the underlying transactions it is responsible for, taking into account the multiannual character of programmes and the nature of the payments concerned.

### ERCEA FP7 and H2020 operational expenditures

The Research & Innovation Framework Programmes (FP) main indicators on legality and regularity<sup>45</sup> are:

- Representative detected error rate, based on errors detected by ex-post audits on a Common Representative Sample (CRS) of cost claims across the Research & Innovation Family.
- Cumulative residual error rate is the extrapolated level of error after corrective measures have been implemented by the Commission services following the audits, accumulated on a multi-annual basis.

Due to its multi-annual nature, the effectiveness of the control strategy of the DG Research & Innovation can only be fully measured and assessed in the final stages of the FP, once the ex-post control strategy has been fully implemented and systematic errors have been detected and corrected.

As stated in Annex 4 to this report, the general objective of the control system designed for FP7 (and the Research Fund for Coal and Steel in DG Research & Innovation) is to ensure that the cumulative residual error rate does not exceed 2% by the end of the Framework Programme's management cycle. For Horizon 2020, the objective is to obtain a cumulative residual error rate within a range of between 2-5 % aiming to be as close as possible to 2%, without necessarily expecting it to be lower than 2%.

Progress against these objectives is assessed annually based on the results of the implementation of the ex-post audit strategy and taking into account the frequency and importance of the detected errors along with cost-benefit considerations regarding the

<sup>44</sup> Anticipated project starting date is exceptionally accepted by the agency, for duly justified reasons, as to timely purchase equipment, recruit new staff or to maintain the continuity of the research team in case of successive grants.

<sup>45</sup> These indicators are described in point 1.1 of annex 4 and comments to the Court of Auditors' remarks on the error rate methodology are presented in annex 10.



effort and resources needed to detect and correct the errors.

### **ERCEA results of the ex post audits for FP7**

The starting point for the calculation of the residual error rate in the Research Family is the Common Representative Audit Sample (CRaS), which aims at estimating on a multi-annual basis the error rate at the level of the programmes, across all the services involved in their management. However, since the risk profile of the "Ideas" programme is inherently lower when compared to the rest of the FP7<sup>46</sup>, the ERCEA has adopted for FP7, since 2015, an alternative assessment to provide additional assurance on the ERC specific population, in line with annex 4, in particular from the multi-annual (2009-2019) ERCEA residual error rate (MUS sample).

At year-end 2019, with a multi-annual detected error rate that amounted to 1.48 % and the residual error of 1.15%, the ERCEA is confident that its results will stay below the materiality threshold of 2% at the end of the "Ideas" programme, thus positively supporting the ERCEA 2019 Declaration of Assurance.

### **Research family results<sup>47</sup> of the H2020 ex-post audits and expectations for Horizon 2020**

Following a review of a sample of ex-post audits and referring to the Commission's methodology for the calculation of the H2020 error rate, the European Court of Auditors observed that "... ex-post audits aim for maximum coverage of the accepted costs, but rarely cover all the costs. The error rate is calculated as a share of all the accepted costs, instead of the amount actually audited. This means that the denominator in the error calculation is higher, so the error rate is understated. In case the errors found are of a systemic nature, the error is extrapolated which partially compensates for the above-mentioned understatement. However, since extrapolation is not performed for non-systemic errors, the overall error rate is nevertheless understated. The understatement of the error rate cannot be quantified. It is, then, impossible to determine whether the impact of this understatement is significant." As a result, the Court introduced recommendation 5.3 to address this observation, which was accepted by the Commission.

In response, the Commission is re-defining its methodology for calculating the H2020 error rate in line with the Court's observations. For the year 2019, the Commission does not have all the data necessary to calculate the error rate according to the revised methodology. However, in order to quantify the understatement mentioned by the Court in its report, it recalculated the error rate based on the sample of 40 audits finalised in 2018 and 2019 selected by the Court for its own DAS work. The methodology applied is that in the cases of non-systemic errors, the denominator used in the error calculation is the sum of costs actually audited and not the sum of all accepted costs. The application of the revised methodology on the 40 samples resulted in an error rate higher, on average, by 0.34% in comparison to the error rate calculated by applying the methodology used in the past. This additional error rate of 0.34% has been used to top up the detected error rate for 2019 calculated according to the methodology used in the past. This results in the following error rates for Horizon 2020<sup>48</sup> on 31 December 2019:

- Representative detected error rate: 2.78%<sup>49</sup>, expected to rise to 3.30% taking into account the results of draft audit reports.

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<sup>46</sup> Please refer to annex 10 for details.

<sup>47</sup> Source of information: DG Research & Innovation - Common Audit Service

<sup>48</sup> The Horizon 2020 audit campaign started in 2016. At this stage, three Common Representative Samples with a total of 467 expected results have been selected. By the end of 2019, cost claims amounting to EUR 16.2 billion have been submitted by the beneficiaries to the services. The audit coverage for Horizon 2020 is presented in annex 10. In addition to the Common Representative Samples, Common Risk Samples and Additional Samples have also been selected. The total of all samples represents 3245 participations. The audits of 2115 participations were finalised by 31/12/2019 (out of which 962 in 2019). This sampling accommodates special needs of certain stakeholders with regard to audit coverage and selection method. In addition, top-ups, which are participations of selected beneficiaries and which are added to the selected participations, are included in the total participations selected.

<sup>49</sup> Based on the 298 representative results out of the 467 expected in the three CRS.



- Cumulative residual error rate for the R&I Family of DGs: 2.15% (1.79% for ERCEA), expected to rise to around 2.31% (1.66% for ERCEA) when taking into account the results of the draft audit reports.

The above-presented error rates should be treated with caution not only because of the above-mentioned top-up. Since not all results of the three Common Representative Samples are yet available, the error rate is not fully representative of the expenditure being controlled. Moreover, the nature of expenditure in the first years of the programme may not be totally representative of the expenditure across the whole period.

Since Horizon 2020 is a multi-annual programme, the error rates, and especially the residual error rate, should be considered within a time perspective. Specifically, the cleansing effect of audits will tend to increase the difference between the representative detected error rate and the cumulative residual error rate, with the latter finishing at a lower value.

As was the case last year, there is evidence that the simplifications introduced in Horizon 2020, along with the ever-increasing experience acquired by the major beneficiaries, affect positively the number and level of errors. However, number of errors still persists, and therefore actions to improve clarity of the rules, as well as compliance with them, have been taken amongst the research family<sup>50</sup>.

In conclusion, DG R&I considers that the 2019 cumulative residual error rate for Horizon 2020 will fall within the target range established in the Financial Statement, and therefore a reservation is not necessary for the Horizon 2020 expenditure.

Regarding the future, the Commission will adapt its methodology for the calculation of Horizon 2020 error rate in line to the Court's observations starting with the audits finalised as from January 2020 onwards.

#### **ERCEA specific error rates for H2020**

The CAS reported the ERCEA representative detected error rate of **1.05%**. For the Specific ERCEA random selection, 160 participations were selected (i.e. 80 participations to audit per year, starting from 2018), and 134 participations were audited by the end of 2019. Although this completion of 83% of the target is not fully representative, it already provides a reasonable estimation of the ERCEA error rate.

Considering the above, ERCEA expects that the 2019 cumulative residual error rate will fall within the target range established in the Financial Statement<sup>51</sup>, and therefore a reservation is not necessary for the Horizon 2020 expenditure, at this stage.

#### **ERCEA administrative expenditure**

The 2019 result for **ERCEA's administrative expenditure's** error rate is 1.18%, below the target value of 1.5% but higher than the 2018 result (0.6%), due to errors detected in Sysper in the calculation of annual travel allowances.

In the context of the protection of the EU budget, the DGs' estimated overall risk at payment, estimated future corrections and risk at closure are consolidated at Commission level.

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<sup>50</sup> For example, the Model Grant Agreement, and its accompanying annotations, have been adjusted to introduce simplifications or clarifications on different points and efforts have been made to ensure clear communication of the rules and guidance to participants and their auditors, with the Host Institutions and Principal Investigators' events (since 2010, respectively 48 and 40 events).

<sup>51</sup> A cumulative residual error rate within a range of between 2-5 % and at the same time as close as possible to 2%, without necessarily expecting it to be under 2%.

The estimated overall risk at payment<sup>52</sup> for 2019 expenditure is € 19.92 million. This is the AOD's best, conservative estimation of the amount of *relevant expenditure*<sup>53</sup> during the year (€ 1 660.71 million) which could not be in conformity with the contractual and regulatory provisions applicable at the time the payment was made<sup>54</sup>.

This expenditure will subsequently be subject to ex-post controls and a proportion of the underlying errors will be detected and corrected in successive years. The conservatively estimated future corrections<sup>55</sup> for 2019 expenditure are € 6.76 million. This is the amount of errors that the DG conservatively estimates will be identified and corrected by controls planned to be carried out in succeeding years.

The difference between those two amounts leads to the estimated overall risk at closure for the 2019 expenditure of € 13.16 million.

ERCEA's data is shown in Table 1 and its accompanying notes below.

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<sup>52</sup> In order to calculate the weighted average error rate (AER), the detected or equivalent error rates have been used; see note 6 to the table.

<sup>53</sup> "Relevant expenditure" during the year; see note 5 to the table.

<sup>54</sup> "Payments made" or equivalent; see note 2 to the table.

<sup>55</sup> The historic average of recoveries and financial corrections (ARC) received from the central services is 0.42%. For other expenditures, ERCEA assumed that the ex-post future corrections would be 0%.

**Table 1 - Estimated overall risk at closure**

<b>ERCEA</b>	"payments made" (FY; m€)	<i>minus</i> new prefinancing [ <i>plus</i> retentions made*] (in FY; m€)	<i>plus</i> cleared prefinancing [ <i>minus</i> retentions released* and deductions of expenditure made by MS] (in FY; m€)	= "relevant expenditure" (for the FY; m€)	Average Error Rate ( <i>weighted</i> AER; %)	estimated overall risk at payment (FY; m€)	Average Recoveries and Corrections ( <i>adjusted</i> ARC; %)	estimated future corrections [and deductions] (for FY; m€)	<b>estimated overall risk at closure (m€)</b>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Programme, Budget Line(s), or other relevant level	as per AAR annex 3, table 2	as per ABAC DWH BO report on prefinancing	as per ABAC DWH BO report on prefinancing	= (2) -/+ (3) +/- (4)	Detected error rates, or equivalent estimates	= (5) x (6)	H-ARC (as per ABAC DWH BO report on corrective capacity), <u>but adjusted</u>	= (5) x (8)	= (7) - (9)
FP7	234.46		326.52	560.98	1.48%	8.30	0.42%	2.36	5.95
H2020	1 778.01	818.40	89.08	1 048.69	1.05%	11.01	0.42%	4.40	6.61
Total operational budget	2 012.47	818.40	415.60	1 609.67	1.20%	19.31	0.42%	6.76	12.55
Total operating budget	51.04			51.04	1.18%	0.60			0.60
Overall ERCEA	2 063.51 mEUR	818.40 mEUR	415.60 mEUR	1 660.71 mEUR	1.20%	=19.92mEUR and 1.20% of (5)	0.42 %	= 6.76mEUR; and 0.41% of (5)	= 13.16 mEUR; and 0.79% of (5)

### Notes to the table

- (1) Differentiated for the relevant portfolio segments at a level which is lower than the DG total.
- (2) Payments made or equivalent, e.g. expenditure registered in the Commission's accounting system, accepted expenditure or cleared pre-financing. In any case, this means after the preventive (ex-ante) control measures have already been implemented earlier in the cycle.
- (3) New pre-financing actually paid by out the department itself during the financial year (i.e. excluding any pre-financing received as a transfer from another department). "Pre-financing" is covered as in the context of note 2.5.1 to the Commission annual accounts (i.e. excluding "Other advances to Member States" (note 2.5.2) which is covered on a purely payment-made basis).
- (4) Pre-financing actually cleared during the financial year (i.e. their 'delta' in the Financial Year 'actuals', not their 'cut-off' based estimated 'consumption').
- (5) For the purpose of equivalence with the ECA's scope of the EC funds with potential exposure to legality & regularity errors (*see the ECA's Annual Report methodological Annex 1.1*), our concept of "relevant expenditure" includes the payments made, subtracts the new pre-financing paid out, and adds the previous pre-financing actually cleared during the FY. This is a separate and 'hybrid' concept, intentionally combining elements from the budgetary accounting and from the general ledger accounting.
- (6) In order to calculate the weighted Average Error Rate (AER) for the total relevant expenditure in the reporting year, the detected error rates have been used for operational budget.  
For administrative expenditure, type of low-risk expenditure, the error rate resulting from ex-ante on salaries was used.
- (8) The historic average of recoveries and financial corrections (ARC) received from the central services is 0.42%. For other expenditures, ERCEA assumed that the ex-post future corrections would be 0%.

- **Other legality and regularity indicators**

**a) Evaluation**

<b>ERCEA 2019 AWP</b>		
<b>Ineligible proposals (not withdrawn)</b>	<b>2019 Target</b>	<b>31/12/2019</b>
StG, CoG, AdG 2019	1.5%	1.46%
SyG 2019	2%	1.0%
PoC 2019	3%	3.1%
<b>Evaluation complaints</b>		
<b>% of re-evaluations out of the overall proposals submitted and following requests for redress</b>	All calls: 0.1%	0.04%

The above table presents the percentage of ineligible proposals and evaluation complaints. The average percentage of ineligible proposals for the 2019 Proof of Concept call (3.1%) slightly exceed the target of 3%. For the third call deadline<sup>56</sup>, applicants submitted a higher number of ineligible proposals (4.8%) with several inadmissible re-applications during the same year.

During the reporting period, the Commission received three requests for legal review in accordance with Article 22 of Regulation 58/2003 ('Article 22 requests') concerning ERCEA's decisions. The agency provided timely contributions to the parent DG in all cases. All three requests stemmed from unsuccessful applicants, of which one concerned an access to documents and two concerned the outcome of the scientific evaluation (subject-matter outside the scope of the Commission's legal review). The case concerning the access to documents request related to a 2015 Starting Grant proposal; it was declared inadmissible by the Commission as being out of scope of Article 22 reviews. The second request, related to an 2018 Advanced Grant proposal and was considered by the Commission as inadmissible because it was submitted after the legal deadline. The third request concerning a 2018 Advanced Grant proposal was closed and rejected as unfounded.

**b) Grant preparation and signature**

<b>ERCEA 2019 AWP</b>	<b>2019 Target</b>	<b>31/12/2019</b>	<b>31/12/2018</b>
<b>% execution of L2/L1 commitment (C8)<sup>57</sup></b>	<b>100%</b>	<b>99.99%</b>	<b>100%</b>

Source of data: ABAC

<sup>56</sup> Please refer to the call calendar page 11.

<sup>57</sup> The indicator for the percentage execution L2/L1 is dependent on the timing of the evaluation process.

Throughout the year, 1 098 grant agreements for a total of € 2 029.68 million were signed, a comparable volume to the one of 2018.

<b>ERCEA specific control indicators</b>	<b>31/12/2019</b>
<b>% of exclusion from granting process following financial viability checks</b>	-
<b>% of weak financial viability checks / total financial viability checks</b>	75 %

Source of data: CORDA

In 2019, four Financial Viability Checks (FVC) were performed. They related either to H2020 granting concluded this year or to amendments signed for Change of Host Institution in FP7 projects.

The outcome of these checks in one case was good and in three cases was weak. In none of the weak cases financial corrective measures were adopted. In one of these cases, an on-the-spot visit was recommended but only if a particular issue would arise during the implementation phase of the project (which started in mid-2019).

### **c) Grant implementation**

<b>ERCEA control indicators – 2019</b>						
<b>Rejection of interim and final payment costs</b>	<b>Number of Invoices</b>		<b>Amount (€)</b>		<b>% of ineligible costs on total declared costs<sup>58</sup></b>	
	H2020	FP7	H2020	FP7	H2020	FP7
<b>Total declared cost</b>	2 398	1 302	1 029 448 192.47	584 742 476.56	0.20%	0.65%
<b>Of which Ineligible costs declared<sup>59</sup></b>	110	215	2 033 236.86	3 824 696.90		

Source of data: DWH BO reports

The above table presents the ex-ante control results, reflecting the percentage of declared costs considered as ineligible.

- **Fraud prevention, detection and correction**

ERCEA has developed and implemented its own anti-fraud strategy since 2011, and it has been updated twice, in 2013 and 2015. Further to the Commission's updates of Anti-fraud Strategy's (CAFS), and of the Common Anti Fraud Strategy in the Research Family Anti-fraud (RAFS) - respectively adopted in April and July

<sup>58</sup> Covering ex-ante rejections by Financial Officers and independent certified auditors (CFS).

<sup>59</sup> Ineligible costs as identified in the recovery context of the respective cost claim (e.g. independent controls, community controls/desk checks and on the spot).

2019 - ERCEA is reviewing its strategy and related actions<sup>60</sup>, reflecting the Commission's and DG Research and Innovation's priorities.

The previous ERCEA action plan covering the period 2015-2017 was fully implemented, providing the agency with a strong capacity to prevent, detect and report potential fraud. Recurrent measures were implemented in 2019, such as the fraud risk assessment, training courses and case handling and providing reinforced fraud arrangements.

At year-end, 10 open cases<sup>61</sup> were registered in ERCEA's register of irregularities and potential fraud ("ERCEA Register"), all related to the management of ERC grants/proposals. Four of these cases were under OLAF investigation and one under OLAF selection. Five cases<sup>62</sup> were under ERCEA's reinforced monitoring – including an EDES case - as these expose ERCEA to a high financial risk. An OLAF investigation was closed with recommendations to be implemented by the end of 2020.

- **Other control objectives: reliability of reporting**

Following the evaluation carried-out by DG BUDG, on behalf of the Accounting Officer of the Commission, of the accounting internal control environment in ERCEA, one recommendation remains open related to the complete registration of legal commitments resulting from expert contracts in the ABAC workflow<sup>63</sup>. DG Research & Innovation has requested an exemption for the registration of expert contracts in ABAC LCK (Legal Commitment management)<sup>64</sup>. The instructions of DG BUDG in response to DG Research & Innovation's note will only be communicated in beginning of 2020.

In accordance with a new strategy for the validation of local systems, DG BUDG assesses on a continuous basis the accounting quality for each DG, service or executive agency on the basis of a desk review of available documentation. This results in a risk score. In 2019, the accounting risk for ERCEA, as assessed by DG BUDG, was medium and the risk score was 25 out of a maximum of 80<sup>65</sup>. According to DG BUDG's risk scoring methodology, this assessment originated in an observation with impact on accounting on the operational budget reported by the Court of Auditors (see § 2.1.2) and the fact that there was still one outstanding recommendation regarding the last validation of local systems, as described above.

## **2. Efficiency**

In 2019, the "Time To Sign" (TTS) and "Time To Grant" (TTG) results of the 2018 calls met their AWP targets with the single exception of the 2018 Synergy Grant call<sup>66</sup>. This confirms the already excellent results of 2018 and reaffirms the effectiveness of all measures ERCEA implemented in the past years for improving the KPI results (please see the detailed results in section 2.1.1.1 and Annex 12).

ERCEA maintained its high efficiency in terms of "Time To Pay" (TTP) from the previous years. All types of payments (i.e. pre-financing, interim, final and expert payments) were well below their legal targets (please see the detailed results in section 2.1.1.1).

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<sup>60</sup> The draft is undergoing the validation process.

<sup>61</sup> End of 2018, 11 cases were registered, 4 under OLAF investigations and 7 under ERCEA reinforced monitoring.

<sup>62</sup> Out of which one was closed in January 2020.

<sup>63</sup> Ares(2019)7518567 – 06/12/2019;

<sup>64</sup> Ares(2018)4355007 – 23/08/2018;

<sup>65</sup> Ares(2019)4516507 – 12/07/2019;

<sup>66</sup> In 2019, SyG 2018 with 460 days registered a TTG moderately above the AWP target of 430 days.

### 3. Economy

Operational budget	31/12/2019	31/12/2018
Total cost of fin. management & control <sup>67</sup> / total value of operational payments made (target:<3%)	2.5%	2.7%

### 4. Conclusion on the cost-effectiveness of controls

Cost-effectiveness indicators are provided for each control stage on the basis of the number of posts allocated to activities, which results from a workload assessment performed during the last quarter of the year. In addition, an overall, agency-wide cost effectiveness indicator, comparing the 2019 administrative versus operational payments, was taken into account as well as an indicator per framework programme.

The result of the overall cost effectiveness indicator in 2019 (2.5%) is comparable to the one of 2018 (2.7%) and remained below its target value of 3%.

While most costs of controls are quantifiable in monetary terms, most of their undeniable benefits are not. The controls related to the scientific evaluation of applications ensure that the most meriting projects are funded following the sole criterion of "excellence". They allow ERCEA to fulfil its mission statement and operational objectives. Benefits of grant implementation controls can be measured by the low error rate resulting from ex-ante controls – H2020 (0.20%) and FP7 (0.65%), even if these are weakened by the deliberate limitation of the depth of the ex-ante controls as part of the overall control framework established for FP7 and H2020. This is also supported by the level of the ex-ante error rate on the operating budget (1.18%), which remained below its target. Non-quantifiable benefits of ex-post controls also bear an inherent deterrent effect as beneficiaries will take extra care over the preparation of their cost claims knowing that on the spot audits may follow. Finally, the results of ex-post control provide a valuable feedback regarding the effectiveness of ex-ante controls. Ex-post control audits also result in reducing the exposure to future errors, thanks to guidance that is provided to audited beneficiaries.

Based on the most relevant key indicators and control results, ERCEA has assessed the effectiveness, efficiency and economy of its control system and reached a positive conclusion on the cost-effectiveness of the controls for which it is responsible.

<sup>67</sup> For a nearly 'pure' grant management DG/EA, this is approximated by comparing the administrative/operating budget to the total operational budget.



## 2.1.1.1 Implementation of the internal control system for the operational budget

### 1. Effectiveness

#### ○ Budget execution:

The operational appropriations are dissociated appropriations, meaning that ERCEA manages separate budgets for commitments and payments. In 2019, the global commitment budget of € 2 017.10 million was fully committed on the basis of the 2019 ERC Financing Decision. In regard to the available payment budget for H2020 of € 1 731.08 million and for FP7 of € 219.19 million in final credits, it was fully consumed by the signature of 609 grants mainly related to 2018 calls.

Indeed, throughout the year, 1 098 grant agreements for a total of € 2 029.68 million were signed<sup>68</sup>, a comparable volume of transactions as last year allowing to effectively meet ERCEA's objectives.

The execution of payments credits reached 100% for both grant implementation and experts.

ERCEA achieved its budget execution target, preserving its excellent KPIs and beneficiaries' satisfaction, despite the parallel implementation of two framework programmes. Specifically, the second half of 2019 was marked by third and final FP7 payments as well as the increasing number of H2020 transactions.

In parallel, the coherent interpretation and application of two sets of rules and the necessary controls for minimisation of any risk for error in the financial transactions across the Grant Management Department was ensured by ERCEA Payments Business Process working group.

The quality of services to ERCEA beneficiaries is of utmost importance for the ERC, and the agency continued its efforts towards simplification and a customer-oriented approach. To this end, the financial report templates for all ERC grant schemes have been reassessed and revised to reduce the reporting requirements to the minimum possible. The related implementation of the templates in the common IT system is included in the DG Research & Innovation's Common Implementation Centre's (CIC) 2020 IT Work plan.

Establishing a complete internal process for ERCEA reporting and payments for H2020 proved challenging because ERCEA depends on the common IT infrastructure. Constructive collaboration and communication with the CIC led to tailor-made, effective quality solutions, in accordance with the ERC grant agreement and in compliance with the common ex-ante control guidelines.

ERC final reporting workflow in COMPASS/SyGMA has been accommodated and includes support to ERC grant termination cases. ERCEA interim and final payments procedures were validated in 2019<sup>69</sup>.

Moreover, the regular evolution of the common IT system and related guidance have been followed by means of tailor-made ERCEA A-Z guides for payments. These were revised twice during 2019 to reflect the additional functionalities for audit implementation, the formal notifications workflow and the update of the CIC ex-ante controls for interim and final payments guidance, following the IAS audit

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<sup>68</sup> On C8 commitment credits voted in 2018 and carried forward to 2019.

<sup>69</sup> Based on the common Reporting and Payments workflow and with maximum alignment to the H2020 Vademeccum.

recommendations<sup>70</sup>.

Furthermore, ERCEA was systematically involved in written consultations for all major guides produced by the CIC and proactively contributed in the most constructive way towards the implementation of ERC-specific technical needs. Future efforts will be focused, both internally and with the CIC, on the continuity of smooth operation for H2020 implementation. In parallel, the agency has been involved in the preparation of the Horizon Europe implementation strategy to ensure the maximum adaptability for ERC operations and satisfaction of the ERC beneficiaries.

○ **Other effectiveness indicators:**

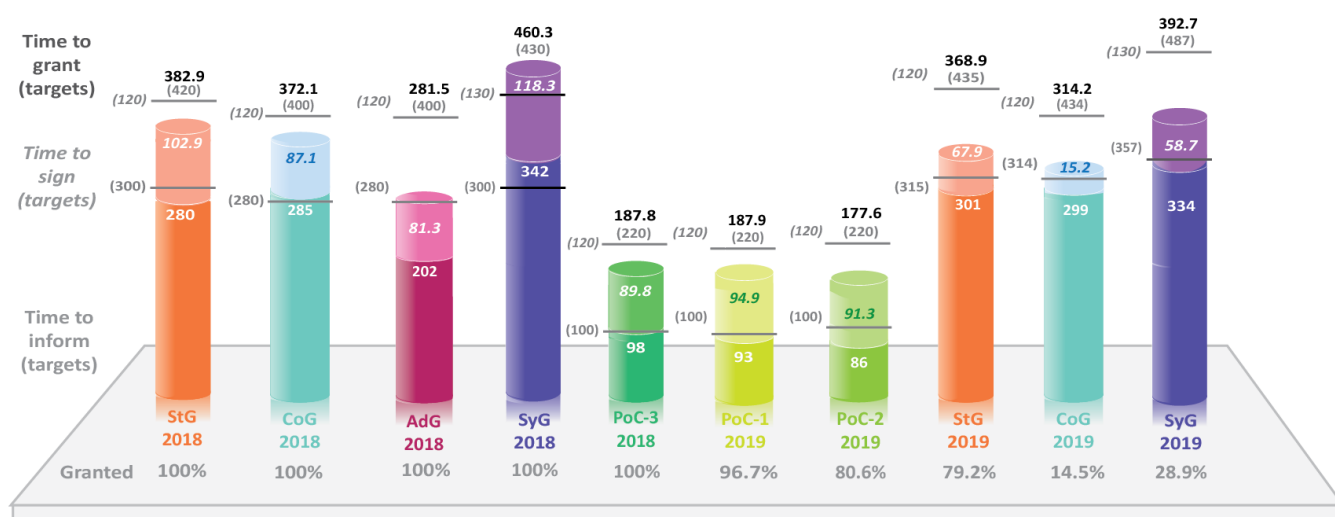
In 2019, each proposal was reviewed by an overall average number of 3.45 remote referees in addition to the reviews written by ERC panel members. This was in line with 2018 data (3.4) and exceeded the 2019 target<sup>71</sup>. These expert reviews guarantee the quality of the evaluation process. The success rates for the finished 2019 calls met their targets<sup>72</sup>.

**2. Efficiency**

**Time To Inform, Time To Sign & Time To Grant (TTI, TTS & TTG)**

The TTS and TTG results achieved in 2019 for the 2018 calls in line with the ones observed in 2018 for the 2017 calls, continued to improve for most of the grant schemes, thanks to an effective strategic planning and resources attribution as well as granting process simplification. Indicatively, for TTG the most substantial gain concerned the 2018 Consolidator Grant and Proof of Concept (deadline 1 and 3) calls with a decrease of 30, 11 and 9 days respectively (the average TTG for main calls fell from 355 days in 2018 to 331 days in 2019). For the 2019 Starting Grant call, we can report a TTS of 68 days with a completion rate of 79% at year-end. These are excellent results so far.

Time to inform, time to sign, time to grant



iStockphoto.com/TarapongS

<sup>70</sup> Ares(2019)569121

<sup>71</sup> ERCEA target 2019: 2 remote referee reviews per proposal

<sup>72</sup> See Annex 12

### Time to Ethical Clearance

ERCEA continued ensuring fast ethical clearance of main list projects<sup>73</sup> (from 51 days on average in 2018 to 39.1 in 2019). As a result, the granting process did not encounter major delays from this activity. However, ethical clearance for the Proof of Concept call failed to meet the 40 days TTC target (with an average of 61.1 days in 2019). This call has a slightly different workflow compared to the other calls. Due to the short length of the Proof of Concept proposals, often additional information needs to be requested and checked before starting the remote phase of the ethics screening. This supplementary step adds around one month to the process. In addition, the total number of selected proposals is much lower than in the other calls, and therefore difficult proposals have a much bigger impact in the average TTC.

### Time to pay FP7 and H2020 – Grants and Experts:

The 2019 TTP results calculated in days were well below their respective target for all types of payments; this relates to both FP7 and H2020. Moreover, they are either comparable with the 2018 results or even improving, e.g. in the case of interim and final payments of both programmes. These results are also reflected in the percentage of payments paid within the contractual timeframe. The agency achieved its targets for almost<sup>74</sup> all payment types.

### 3. Economy

Research Family harmonised KPIs	31/12/2019	31/12/2018
<b>Average project mngt cost per running* project (staff FTE * standard staff cost)<sup>75</sup></b> (ALL projects - Range of € 5.000 – 10.000)	4 154.88 €	3 764.38 €
<b>Average number (Range of 15 – 35) &amp; value of running projects managed 'per' staff FTE (Range of € 1 Mio – 50 Mio)</b>	24.43 44.9 €Mio	25.47 45.2 € Mio

### 4. Conclusion on the cost-effectiveness of controls

The result of ERCEA's overall cost effectiveness indicator, which compares the administrative budget to the total operational budget, reached 2.5%<sup>76</sup> in 2019, and is at comparable level to the 2018 result (2.7%); it was below the agency's target value of 3%.

In addition, the results of ERCEA's overall cost effectiveness per framework programme are 5.6% for FP7 and 2.1% for H2020, reflecting the more intensive

<sup>73</sup> Indicators provided in Annex 12

<sup>74</sup> H2020 Experts payments achieving 98.9% versus a target of 100%.

<sup>75</sup> FTE's accounted for are the staff intervening in the grant execution and monitoring process taking into account their contribution to the process and their work pattern. Running projects are those related to commitments with completion flag set to "no" in ABAC.

<sup>76</sup> DG Research & Innovation, as the lead DG, ensures the overall effective coordination within the Research & Innovation Family. Its Common Implementation Centre (CIC) provides common services (legal support, ex-post audit, IT systems and operations, business process.) to all entities implementing H2020. The CIC ex-ante controls costs represent 0.37% of the total H2020 budget implemented in 2019 while the part dedicated to ex-post audits accounts for 0.13%, the total CIC cost representing 0.50%. Adding the CIC and ERCEA costs would result in an overall cost of 3% matching ERCEA target.

internal control system of FP7 compared to H2020 as well as the different maturity levels of the two consecutive programmes.

Finally, presented by process stages, the ERCEA costs related to call coordination, evaluation and selection of proposals is estimated at 0.91% of the total H2020 committed credits, and ERCEA costs related to grant preparation and signature at 0.33% of the total individual commitments. The ERCEA costs related to grant implementation stood at 1.28% of the total payments, while those of ERCEA ex post controls were estimated at 0.04% of the total audited amount.

## 2.1.1.2 Implementation of the internal control system for the operating budget

### 1. Effectiveness

ERCEA 2019 AWP	2019 target	31/12/2019	31/12/2018
% budget execution commitments	99%	<b>99.99%</b>	99.6%
% budget execution payments (C1+C8)	99%	<b>98.97%</b>	99.5%
ERCEA 2019 AWP	2019 target	31/12/2019	31/12/2018
No material findings related to the sound financial management and legality and regularity of budget's underlying transactions in the financial report of the CoA	0	0	0

### 2. Efficiency

ERCEA 2019 AWP	2019 target	31/12/2019	31/12/2018
Number (and % of total) of late payments for the administrative budget	<b>&lt;20 (&lt;1%)</b>	<b>22 1.70%</b>	25 1.69%
Average time to pay (days)	<b>15</b>	<b>12.4</b>	12.93
% of error in transactions related to staff expenditure (salaries) detected through ex-ante checks	1.5%	<b>1.18%</b>	0.6%

The number of late payments on the administrative budget exceeded the target mainly due to late mission cost reimbursements in the beginning of the year when the opening of the ABAC accounting system was delayed.

### 3. Economy

Administrative budget	31/12/2019
Cost of fin. management & control / total value of operating payments made	2.5%

### 4. Conclusion on the cost-effectiveness of controls

The services assessed the result of the cost-effectiveness of managing ERCEA's administrative budget of 2.5% positively, especially considering the intensity of

the ex-ante controls performed; they were commensurate to the related risks (in particular reputational risks). These controls covered a high volume of transactions for 2019 (about 1 600<sup>77</sup>) of low value (about € 9 500<sup>77</sup>).

## 2.1.2 Audit observations and recommendations

This section sets out the observations, opinions and conclusions reported by auditors – including the limited conclusion of the Internal Auditor on the state of internal control<sup>78</sup>. Summaries of the management measures taken in response to the audit recommendations are also included, together with an assessment of the likely material impact of the findings on the achievement of the internal control objectives, and therefore on management's assurance.

In 2019, the agency implemented the audit recommendation in the context of the IAS audit on H2020 Grant Management (Phase II)<sup>79</sup>, improving the effectiveness and efficiency of the ethics monitoring process. In particular, an IT reporting tool was deployed allowing the follow up of tasks showing the pending ones and the related number of overdue days. The agency enhanced the functionality of reminders embedded in the Ethics Monitoring Tool (EMT) thanks to development of IT based reporting providing lists of grants for which the beneficiary has not replied on time. A reporting mechanism to the acting Director was also established; cases where more than two reminders have been sent to principal investigators without receiving the expected feedback are flagged. This recommendation was implemented early in 2020, with the adoption of the revised ethics review and monitoring procedure<sup>80</sup>. The IAS follow-up audit is pending.

ERCEA implemented the IAS recommendation stemming from the audit on dissemination and exploitation<sup>81</sup> within the deadline by improving the monitoring of compliance with dissemination and exploitation contractual obligations and reporting requirements. The IAS follow-up audit is pending.

Finally, the audit launched in 2018 on "ERCEA's governance" aimed at assessing the governance structure which is specific to ERCEA (i.e. the ERC Scientific Council, the ERC Board, ERCEA Steering Committee, DG Research & Innovation as the "parent" DG and the communication and collaboration mechanisms between all these actors) was closed in January 2020. The auditors' preliminary survey concluded that the governance framework of the agency is adequately designed and assessed the inherent risks related to its implementation as medium to low.

IAS concluded<sup>82</sup> in its contribution to the 2019 AAR process, based on the work undertaken in the period 2017-2019, that the internal control system audited are effective.

Further to its audit on the 2018 provisional annual accounts related to the operating budget, the Court of Auditors gave a clean opinion regarding the fair view of the annual accounts as well as the regularity and legality of the transactions underlying the accounts. The Court raised two observations, accepted by the agency<sup>83</sup>. First, on the legality and regularity of the transactions, the Court considered that "The agency should make sure that all EU and national

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<sup>77</sup> Excluding salaries;

<sup>78</sup> Ares(2020)930823 – 13/02/2020;

<sup>79</sup> Ares(2018)6101661 - 28/11/2018;

<sup>80</sup> Ares(2020)374324 – 21/01/2020;

<sup>81</sup> Ares(2019)557337 - 31/01/2019;

<sup>82</sup> IAS opinion on period 2017-2019, covering the above-mentioned audits as well as the "Closure of FP7 projects in ERCEA" which was closed in June 2018.

<sup>83</sup> In its reply of 28 June 2019 (Ares(2019)4121831).

legal provisions are respected when using IT consultants". The agency demonstrated that a clear difference exists between ERCEA staff and the intramural IT consultants, acknowledging a potential area for improvement in its reply: "The agency will consider measures to avoid potential confusion as to who determines the functions assigned to IT consultants, in particular by implementing the guidelines on the use of the in house service providers that are being reviewed by the Commission". Second, on internal control, the Court noted that the agency should use order forms for using interim workers that include all the information requested by the law, especially the reasons for using interim workers. The agency accepted to revise its order forms to include the applicable justification in line with the framework contract and its tender specifications.

The Court of Auditors reported shortcomings in the risk matrix and risks identified for accounting process "cut-off" in its audit report on the reliability of the 2018 provisional annual accounts regarding the operational budget, in its statement of assurance (SoA) for the financial year 2018. Further to the agency's reply<sup>84</sup> that provided the revised risk assessment and risks matrix for 2019, the Court closed its audit.

### **2.1.3 Assessment of the effectiveness of internal control systems**

The Commission has adopted an Internal Control Framework (ICF) based on international good practice, to ensure the achievement of its policy and management objectives. Compliance with the internal control framework is a compulsory requirement.

ERCEA uses the organisational structure and the internal control systems suited to achieving its policy and internal control objectives in accordance with the internal control principles and is aware of the risks associated with the environment in which it operates.

ERCEA had assessed its internal control system during the reporting year and concluded that it is effective. All components and principles were present and functioning as intended, with minor improvement possibilities identified.

As a first source of the annual effectiveness assessment, ERCEA considered its results of its internal control monitoring criteria (ICMC), which allowed concluding overall the effectiveness of all principles. To complement this information, ERCEA launched an Internal Control Assessment (ICAT) at the end of the year that involved the entire management team, all Heads of Sectors, as well as a sample of 221 randomly selected staff members<sup>85</sup>. The related participation rate amounted to 75% and 54% respectively<sup>86</sup> and resulted in an overall effectiveness of 87%. It should be noted that the survey for management entailed 39 questions, the one for the staff 24.

The ICMC result regarding the percentage of staff having attended the training on ethics and integrity remained below its target (73% versus 85%), but was assessed as effective, considering the corresponding ICAT result of 94%. Also, the ICMC result of 76% (target: 80%) of staff members having attended a fraud training was assessed as effective looking at the related ICAT results (93% management and staff).

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<sup>84</sup> Dated 7 June 2019.

<sup>85</sup> Covering 50% of ERCEA staff (excluding the management team and all Heads of Sectors).

<sup>86</sup> The target of staff participation was set at 35%, considering that staff was invited for the first time to a survey related to Internal control.

During the year, 22 non-compliances and requests for exceptions were registered by several units. None of them were considered the result of an internal control weakness. The increase in reporting such non-compliances and requests for exceptions compared to 2018 (+7) was assessed as a positive outcome of the awareness campaign on the Internal Control Framework that the Internal Control team rolled out throughout the year in all units.

The RMIC performed continuous monitoring. The main instruments used were the quarterly management reviews of the agency's performance and indicators that were supported by the internal scorecards; they also included internal control indicators. In addition, the agency reached an implementation rate of audit recommendations within their deadline of 100%. At year-end, the Risk Register showed an implementation rate of mitigating measures related to medium and high risks within deadline of 71% (2 actions were postponed to 2020<sup>87</sup>). It is underlined that none of the related risks materialised in 2019.

In summary, ERCEA assessed the internal control system during the reporting year and concluded that internal control principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified related to Principles 1<sup>88</sup> and 8<sup>86</sup> of the ICF. They support the declaration of assurance.

## 2.1.4 Conclusions on the impact as regards assurance

This section reviews the assessment of the elements already reported above (in Sections 2.1.1, 2.1.2 and 2.1.3), and the sub-conclusions already reached. It draws an overall conclusion to support the declaration of assurance and whether it should be qualified with reservations.

### Overall Conclusion

The information reported in the AAR covers both the operational budgets related to the FP7 Ideas and to the H2020 Excellence Frontier Research programmes as well as the operating budget managed by ERCEA in 2019 and supports the statements of the Declaration of Assurance. It derives from management's and auditors' monitoring, based on the systematic analysis of the evidence available as reflected in the reports listed above in part 2.

Management's assessment is based on the results of key indicators related to the budget execution addressing the statement on the "use of resources for the intended purpose". It further assesses the "sound financial management" and the "legality and regularity of underlying transactions" and reports on measures implemented to prevent, detect and mitigate fraud.

As demonstrated throughout the report, the results of performance and control indicators positively support the five statements of the Declaration of Assurance. Although two minor exceptions<sup>89</sup> were noted relating to the efficiency component of the sound financial management in the proposal evaluation phase, these do not impair the declaration of assurance. Indeed, neither the agency's budget execution nor its reputation was impacted. Also, the agency effectively achieved

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<sup>87</sup> One related to the DPO migration exercise from notifications to records, the other one to the update of the "Handling and reporting internally irregularities and fraud".

<sup>88</sup> Principle 1 "Integrity & ethical values" and Principle 8 "Fraud risks". The identified deficiencies are related to trainings to staff and related improvements are envisaged in 2020 with trainings targeted to newcomers.

<sup>89</sup> Please refer to page 8 where the two minor deviations are mentioned.



its operational objectives, its granting and payment efficiency and provided evidence of the legality and regularity of its underlying transactions and of its overall cost-effectiveness.

The assessment of the internal control system resulted in an overall positive conclusion, supporting the Declaration of Assurance.

Finally, the fraud prevention and detection mechanisms in place did not reveal any matter that would adversely impair the Declaration of Assurance.

The report has been prepared with the objective of providing the reader with reliable, complete and correct information on ERCEA's state of affairs for the reporting period ("true and fair view"). Finally, it does not knowingly contain any material inaccuracy or omit any significant information ("non-omission of significant information"). Management confirms the non-occurrence in 2019 of any significant weakness or reputational event that would have adversely impacted the assurance provided below.

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are appropriately monitored and mitigated; and necessary improvements and reinforcements are implemented. The acting Director, in his capacity as Authorising Officer by Delegation, has signed the Declaration of Assurance.



## 2.1.5 Declaration of Assurance

I, the undersigned,

Executive Director of ERCEA (acting)

In my capacity as authorising officer for the operating (administrative) budget and authorising officer by delegation for the operational budget

Declare that the information contained in this report gives a true and fair view<sup>90</sup>.

State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the European Research Council Executive Agency.

Brussels, 31/03/2020,

*Signed in Ares*

Waldemar KÜTT

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<sup>90</sup> True and fair in this context means a reliable, complete and correct view on the state of affairs in the DG/Executive Agency.

## 2.2 Other organisational management dimensions

According to the Financial Regulation (art 30), the principle of economy requires that the resources used by the institution in the pursuit of its activities shall be made available in due time, in appropriate quantity and quality and the best price. The principle of efficiency concerns the best relationship between resources employed and results achieved.

The respect of these principles is continuously pursued through the implementation of internal procedures and predefined practices. These procedures ensure that activities are executed in an efficient manner (e.g. the different workflows contribute to the efficient cooperation between staff and units) and according to the principle of economy (e.g. the procurement rules ensure procurement in optimal conditions).

ERCEA is continuously fine-tuning its internal arrangements in order to improve the efficiency and economy of its operations, as illustrated by the following initiatives.

The grant management IT tools were further adapted, in order to improve economy and efficiency. An example that produced positive results is the ARIS tool (Automated Research Integrity Services) that was activated for the 2018 Advanced Grant, 2019 Starting Grant, 2019 Consolidator Grant and 2019 Synergy Grant calls as part of the GAP COMPASS workflow. This tool allows generating a "double funding" report comparing the projects under grant preparation with the entire population of already funded H2020 projects. In this way, the verification of "double funding" rule becomes even more efficient. Another example is the creation of an internal tool, which provides the full image of each principal investigator's participation in ERC grants, including in Synergy grants. This tool allows avoiding principal investigator's having multiple grants running in parallel.

The H2020 Host Institutions events started in 2016 and have reached out to 42% of all ERC Host Institutions. More than 370 Host Institutions participated to date (84% of the top 100 beneficiaries). The events enhance the positive communication channels between the beneficiaries and ERCEA staff. Increasing the financial administrators' knowledge helps reduce weaknesses in HIs' internal control systems and subsequently contributes to maintaining a low ERC error rate.

This section covers also the human resources and information management as well as external communication<sup>91</sup>.

### 2.2.1 Human resources management

In 2019, ERCEA hired 41 new staff members, and reached its target occupation rate, with 98.3% of posts occupied, hence counting 508 staff members<sup>92</sup> on 31 December 2019. The average turnover rate was 4.99%, significantly below the 7.4% rate of 2018.

The internal mobility scheme continued to be enhanced to support the professional engagement and development of the agency's staff. Over the period, 31 positions were published internally, including all posts becoming vacant, resulting in eight internal mobility moves. Seven agents changed their type of contract within the agency after having succeeded in staff selection processes.

As foreseen, in view of filling current and future vacant posts, the agency

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<sup>91</sup> For an extensive reporting on all components, please refer to Annex 2.

<sup>92</sup> 494 staff members on 31 December 2018.

organised 8 specific selection processes in 2019<sup>93</sup>. A total of 68 CAs, 15 TAs and 11 SNEs were included on the resulting reserve lists. The agency also continued to support TA 2(f) Inter-agency Mobility, publishing eight posts.

ERCEA's training offer addressed the six objectives of ERCEA Learning and Development Framework<sup>94</sup>, with a special focus on accommodating competency needs to ERCEA's mission and objectives and supporting the agency in going more digital. To that end, 176 training actions (+30% against 2018) have been organised in-house throughout 2019, which, together with the Commission training offer, resulted in an average of 5.9 formal training days per staff member.

Finally, the agency launched a job-shadowing exercise among the five Executive Agencies based in Brussels and kicked off the language conversation tables initiative among the three Executive Agencies of the COV2 building.

A key objective of Internal Communication was to keep staff close to science through scientific seminars and conferences or "visits to the lab", as well as close to Europe, e.g. by encouraging staff to act as ambassadors for the European elections (promoting the EP information campaign, photo competition, information session jointly with the REA, regular internal communication activities).

The cooperation among Executive Agencies intensified in 2019 through common networks (e.g. COFO, Ethics Correspondents), and a number of HR initiatives were organised jointly (e.g. Vitality Week, Ethics Week, People4People). A Common Staff Committee of all six Executive Agencies and a Common Committee for Prevention and Protection at Work representing the five Brussels based Executive Agencies were also established.

Multiple awareness raising campaigns were organised throughout the year. Concerning ERCEA's anti-harassment policy, activities were addressed to management and staff, and ERCEA jointly organised the selection of new Confidential Counsellors with EASME. On the topic of Ethics and Integrity, an Ethics Week was organised with REA.

## 2.2.2 Information management aspects

As regards the compliance with the new Data Protection Regulation, the ERCEA updated its inventory of the data processing operations and put in place new templates for the record of processing personal data, the Data Protection Notice (DPN) and Data Protection Impact Assessment. The migration exercise from notification to record was launched in the Agency. Info session and training took place with all the staff involved in the drafting of the records.

Internal rules governing restrictions of data subjects' rights have been drafted in collaboration with other Executive Agencies and submitted to the EDPS for their opinion.

The Agency took part also in the negotiation of the Memorandum of Understanding regulating the joint controllership situation within the research family and contributed to the update of the DPN related to the processing operations for personal data for grant evaluation, grant management and experts

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<sup>93</sup> Namely, 4 FG IV: budget/finance adviser, communication adviser, two project adviser selections; 1 FG III: communication officer; 1 FG II: administrative assistant; 1 SNE: multiple profiles and 1 TA: Research Programme Agent in Ethics Review and Monitoring.

<sup>94</sup> 6 objectives : Accommodating competency needs for ERCEA mission and daily business; Ensuring ERCEA staff agility; Promoting staff development; Integrating new-comers; Helping staff retention through motivation and caring environment; Helping the agency in going more digital.

in Horizon 2020.

Results related on Document management are provided in Annex 2.

### **2.2.3 External communication activities**

ERCEA supports the Scientific Council, in line with its mandate to communicate with the scientific community, key stakeholders and the general public. It also feeds into the communication of the Commission's research family and corporate communication. Its 2019 communication activities followed three main objectives<sup>95</sup>:

#### **Attract the best ideas and the brightest minds**

The focus of this objective is to target excellent researchers around the world and raise awareness of the ERC funding schemes and international agreements. To do so, the ERC took part in several scientific conferences in Europe and beyond (USA, Brazil, Japan, China...). It also promoted content related to career paths and opportunities across many of its own media, collaborating with EU Delegations outside Europe, the Euraxess offices, the National Contact Points and other key partners. In total, the ERC participated in 22 events during the year (including presentations by 75 ERC grantees). These events brought together more than 20 000 participants, and generated significant media coverage (particularly the event on frontier research and sustainable development organised by the ERC in December, as well as its participation in the Davos and Tianjin World Economic Forum events). In addition, a stakeholder survey was carried out in order to gauge the awareness and perceptions of ERC grants and to gather recommendations for improving communication at EU and national levels.

#### **Share the passion for frontier science**

The variety of research covered by the ERC provides a rich source of content to communicate beyond the research community. This year, the ERC used this communication potential to reach science media and journalists, as well as to create its own news stories. A particular highlight of the year was the announcement of the world's first image of a black hole, resulting from an international collaboration featuring three ERC grantees. The European media launch of the news was coordinated by ERCEA and achieved record-breaking results in terms of reach and impact (over 3.1 million views of the press conference, the most shared image ever via the Commission's social media accounts etc). Over 200 ERC stories were presented as videos, podcasts and articles via the ERC's website, online magazine, the ERC's social media channels, Horizon Magazine and CORDIS. An ERC story was featured in the Commission's corporate EUProtects campaign. ERCEA also further reinforced its collaboration with key communication partners and multipliers, including Host Institutions' communication officers – a useful partner in spreading the stories of ERC grantees, for example, when announcing the results of new ERC calls. The new ERC Public Engagement with Research Award was launched by Commissioner Moedas and ERC President Jean-Pierre Bourguignon in September 2019.

#### **Position the ERC as a success story for Europe**

To demonstrate the relevance and the added value of the ERC for Europe and its citizens, the ERC organised several communication activities targeting decision-

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<sup>95</sup> See Annex 2.4 for detailed KPIs and results.

makers at international, EU and national levels, key influencers and opinion-leaders, as well as members of the public who have an interest in research related topics. These included a joint event with the European Parliament in Brussels and its annual participation in the World Economic Forums in Davos and Tianjin. Press activities were organised to enhance the ERC's visibility and reputation for excellence and to support its broader narrative within the European Union. The ERC President and the members of its Scientific Council took part in numerous communication and media occasions to promote this message.

These external communication actions supported the wider corporate narrative on the added value of the EU, its budget and the Horizon 2020 programme for research & innovation. ERCEA cooperated closely with DG COMM and DG Research & Innovation throughout the year. This enhanced cooperation is reflected in the increased reach achieved this year on social media (see Annex 2 for figures).