



European
Commission

Annual Activity Report 2021

EUROPEAN RESEARCH EXECUTIVE AGENCY

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THE AGENCY IN BRIEF

The European Research Executive Agency (REA), mandated by the European Commission to support EU Research and Innovation policy, funds and assists high-quality research and innovation projects that generate knowledge leading to a greener world, in which Europe has prosperous, inclusive economies and societies that take full advantage of the digital age.

REA was established in 2007 to implement parts of the 7th Framework Programme for Research and Technological Development (FP7) and, from 2014 until 2020, parts of the Horizon 2020 Framework Programme for Research and Innovation. REA managed approximately 18% of the Horizon 2020 budget and is the largest of the six EU executive agencies. Since 1 April 2021 it is implementing several parts of the successor to Horizon 2020 accounting for 22% of the total programme's budget, Horizon Europe, as well as two further EU programmes. In late 2021, REA also begun to contribute to the five EU Missions launched by the Commission in September 2021. In particular, REA was fully involved in the development and the launch of the EU Mission entitled "A Soil Deal for Europe". Located in Brussels, REA is managed by the Director, a senior official seconded from the Commission, and by its Steering Committee composed of representatives of its parent Directorates-General (DGs).

Figure 1 - Overview of REA activities: Agency in numbers

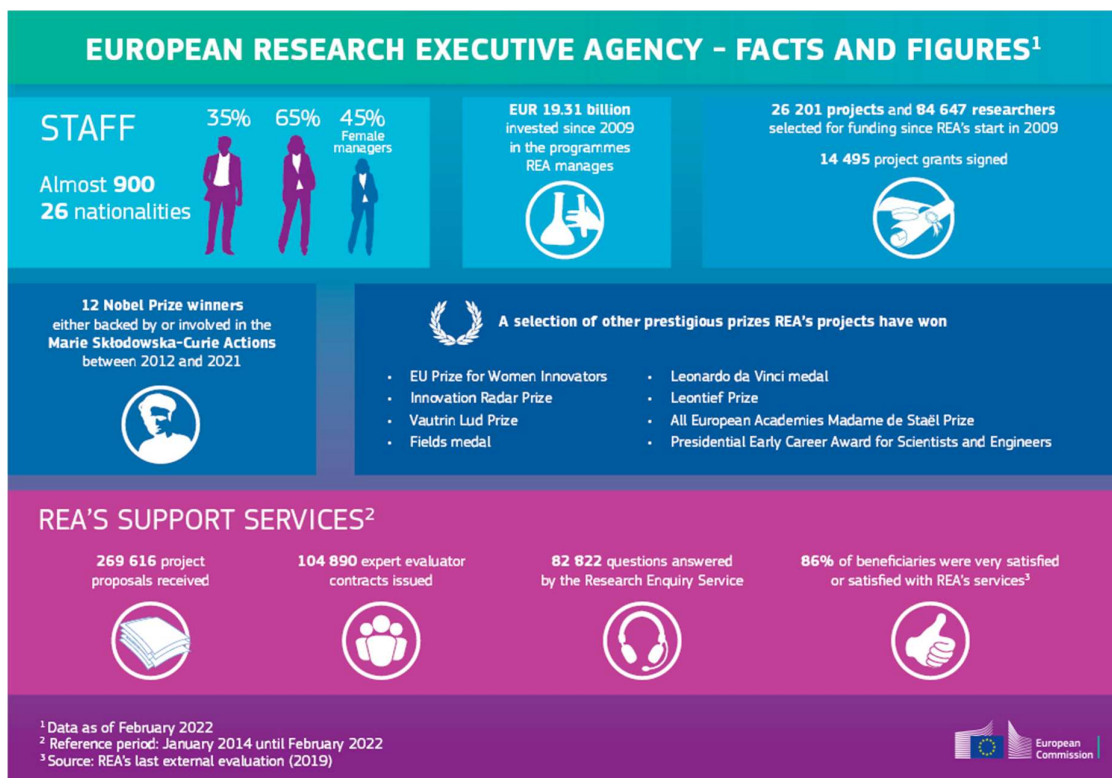


For the programme parts delegated to the Agency, it publishes calls for proposals, arranges their evaluation by independent experts, and prepares grant agreements. REA then monitors the technical and financial implementation of the funded projects, facilitating the dissemination and take-up of their outputs by policy-makers and others.

REA delivers administrative and logistical support services to EU bodies implementing Horizon Europe and selected other programmes. These services include:

- Planning and support for publication of calls for proposals;
- General logistical support for the proposal evaluations including the management of the evaluation facility;
- Contracting and payment of the independent experts who evaluate proposals;
- Supervising the Research Enquiry Service (RES), which answers questions on EU research and innovation funding and on the participant validation services mentioned below.

Figure 2 - Overview of REA activities: Facts and figures



REA also provides, for any EU programme under direct management by the Commission, validations of the legal status and financial capacity of participants in grants and procurement activities.

EXECUTIVE SUMMARY

This Annual Activity Report is a management report of the Director of the European Research Executive Agency 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 ⁽¹⁾.

A. Key results and progress towards achieving the Commission's general objectives and DG's specific objectives (executive summary of section 1)

2021 was marked by the launch of REA's third mandate, effective on 1 April 2021. REA's intensive preparatory work, which started already mid 2020, ensured a smooth transition.

REA's portfolio went through an important transformation, due to the reshuffling of programmes between the executive agencies and further delegations from the Commission for the multiannual financial framework 2021-2027. Newly delegated programmes included a transfer of the management of open projects from their predecessor programmes. This created specific challenges to REA for ensuring a full scale operation covering all stages of the project life cycle as of the first day under the new mandate.

REA's core business remained focused on direct grant management under the research and innovation framework programmes (Horizon 2020 (H2020) and Horizon Europe (HE)), the Research Fund for Coal and Steel (RFCS) and the programme for Information provision and promotion of agricultural products (AGRIP). With this third mandate, REA is also handling procurement operations as part of its operational management.

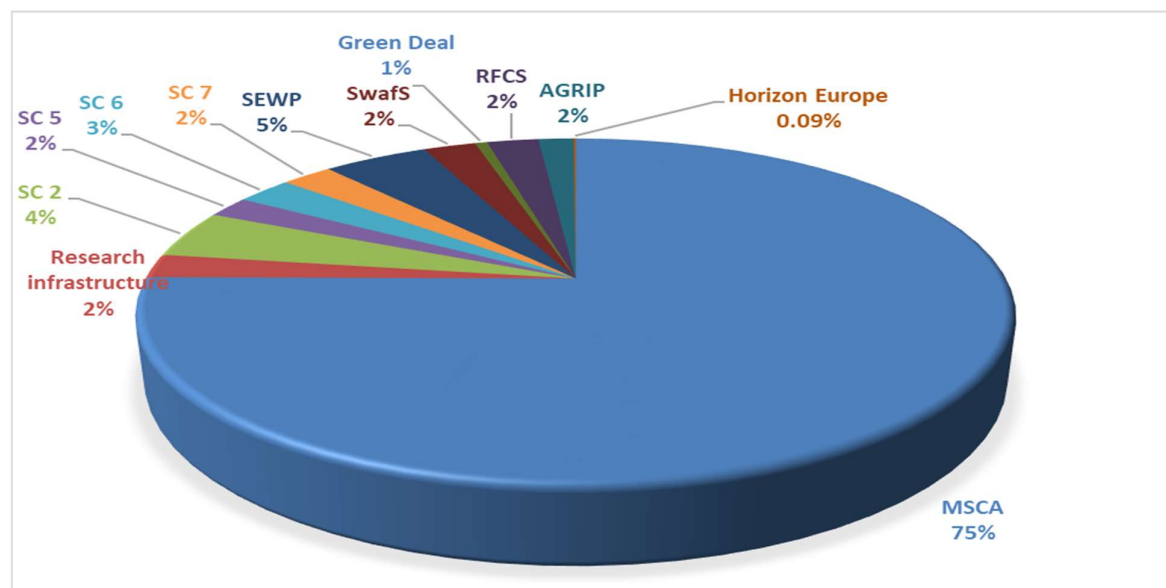
During the year, important efforts were made to integrate the new activities into the Agency's overall control system and ensure as much harmonisation of the work processes as possible.

Implementation of the delegated activities

With regard to programme management, the key performance indicators show that the Agency maintained its excellent performance in the management of calls and grants. This was achieved in spite of the delayed start of the Horizon Europe programme, which triggered important adjustments to the work planning and complex call planning within a reduced timeframe. The HE calls were launched according to the work programmes and 11 137 proposals were received before the end of 2021. For many calls the evaluation of proposals and the signing of grants will be finalised in 2022. Compared to 2020, the number of open projects at year-end increased from 6 595 to 7 444. In addition, 29 procurement contracts were running at the end of the year for AGRIP.

⁽¹⁾ Article 17(1) of the Treaty on European Union

Figure 3 Portfolio of grants managed by REA on 31.12.2021 (7 444 grants)



Under the new mandate, the Agency continued to deliver administrative and logistical support to all Commission's services by validating participants for grant and procurement operations under direct management. It supported call planning for all programmes that take part in the eGrants platform and managed contracting and payment to expert evaluators for the R&I programmes (other than ERC).

REA's key performance indicators show stable and excellent performance for these support services. REA's clients acknowledged the quality of the participant validation services, as further underlined by the conclusions of the Internal Audit Service following its audit on REA's role in implementing the Single Electronic Data Interchange Area (SEDIA).

Overall, the double challenge of the reorganisation and the late start of the Horizon Europe programme, while operating in a remote working environment, made 2021 a particular year. In spite of these circumstances, the Agency's performance has remained on target, as further demonstrated in this report.

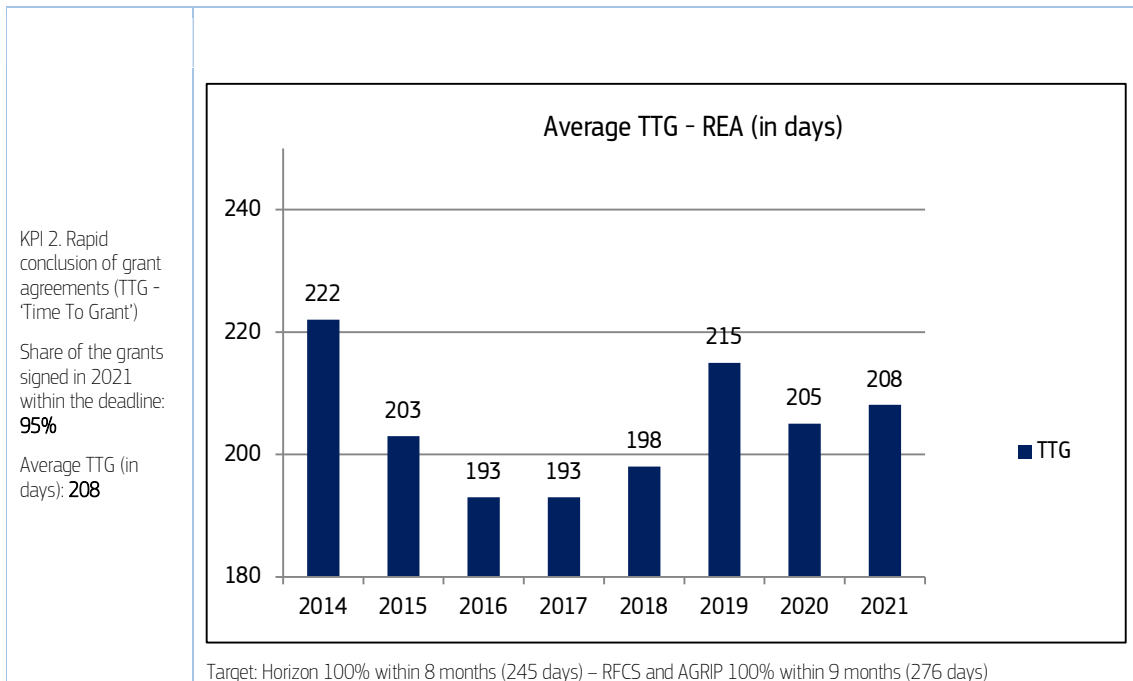
Organisational management

The REA teams dedicated to human resources, information management, and communication played crucial roles in maintaining the continuity and coherence in REA operations throughout the transition to the new mandate and an updated reorganizational structure.

By the end of the year, REA has filled 97.9% of its authorised positions and all newcomers have been duly welcomed and integrated in the Agency's organisation and processes. The internal control survey brought evidence that staff were well aware of the mission and objectives of the Agency and that the internal communication was effective and efficient.

B. Key Performance Indicators (KPIs)

KPI 1. Fully implementing the operational budget	2014	2015	2016	2017	2018	2019	2020	2021
	100%	100%	100%	100%	100%	100%	100%	100%
	Target: 100% implementation of commitment and payment appropriations							

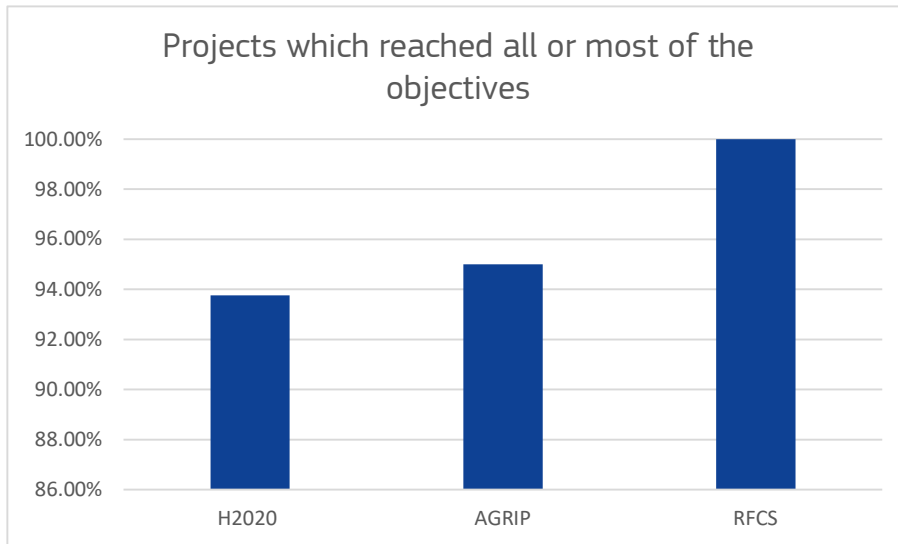


KPI 3. High quality of the key procedures for scientific and grant management

Share of projects that achieved all or most of their objectives

Sources: Corda for H2020²

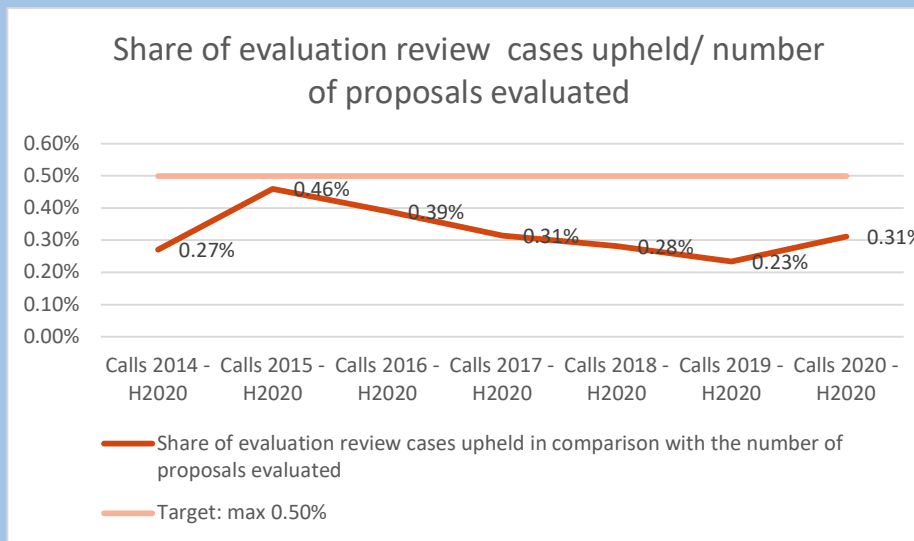
AGRIP RFCS³



Target: 90% of closed projects achieved most of their objectives

KPI. 3 High quality of the key procedures for scientific and grant management

Number of complaints on evaluation results upheld or partially upheld (evaluation review)

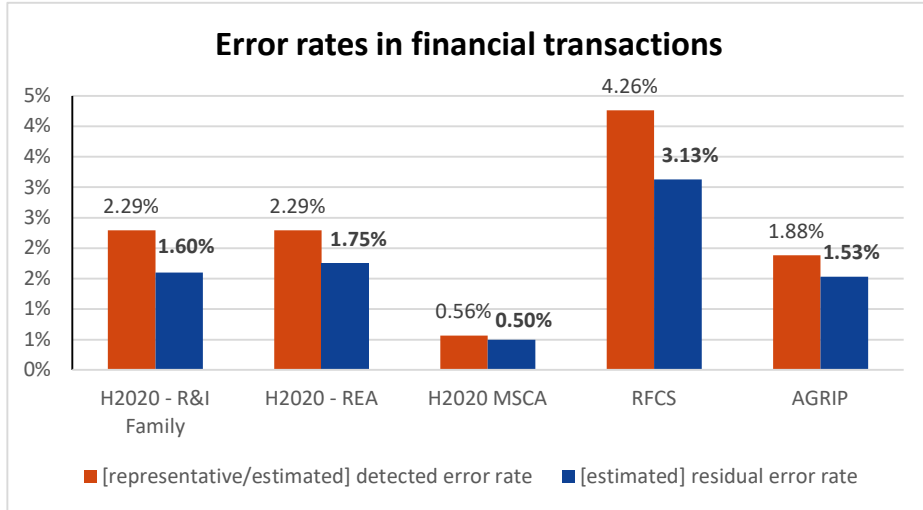


Target: Maximum 0.50% of evaluated proposals

² The statistics include all projects signed until the end of 2021 and are based on the assessment of Horizon 2020 project reports. At this moment, data is available only for 48.71% of closed or on-going Horizon 2020 projects managed by REA.

³ AGRIP and RFCS figures include only grants completed in 2021 and are based on management best estimate.

KPI 4. Legality
/ regularity of
financial
transactions



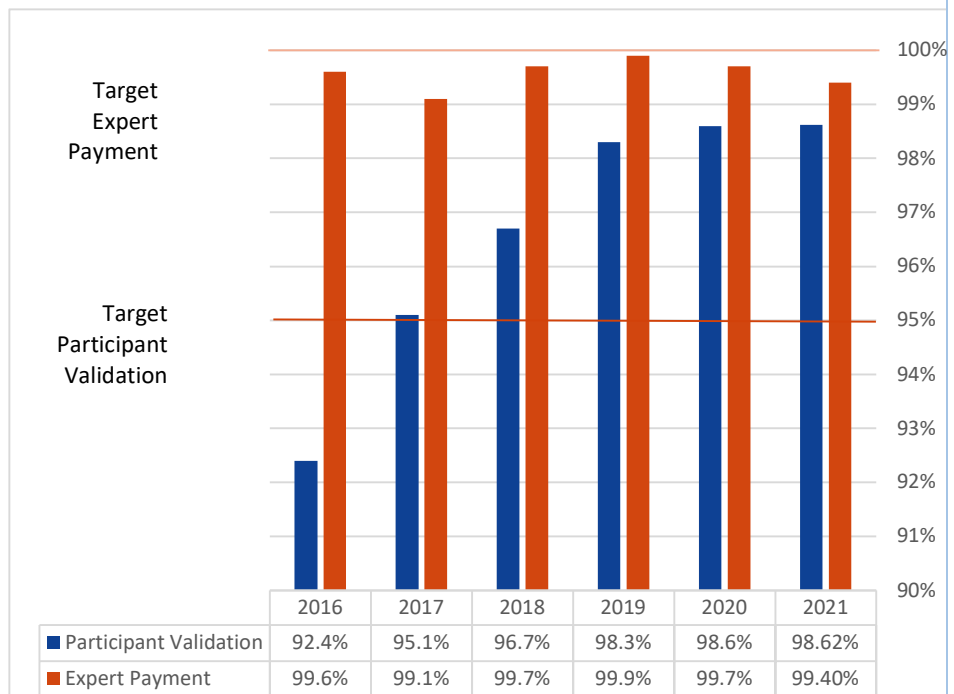
Target: Horizon 2020:

- Overall target : as close as possible to 2% (within the range of 2-5%)
- Specific target for the MSCA: below 2%

Non-Horizon programmes: Overall target : below 2%

KPI 5.
Providing
efficient
support
services to the
Research DGs
and other
client services

-Time to validate
participants
-Time to pay for
experts



Target:

- 95% of participants validated within 90 days from the 'raise priority' date
- 100% of expert payments carried out within 30 days

C. Key conclusions on Financial management and Internal control (executive summary of section 2.1)

In line with the Commission's Internal Control Framework REA has assessed its internal control systems during the reporting year and has concluded that it is effective and the components and principles are present and functioning well overall, but some improvements are needed. Please refer to AAR section 2.1.3 for further details.

In addition, REA has systematically examined the available control results and indicators, as well as the observations and recommendations issued by the internal auditor and the European Court of Auditors. These elements have been assessed 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. In response to audit recommendations, REA will strengthen controls on protection of personal data of participants registered in the central register and will improve priority setting in further developing the current IT tool (PDM) supporting participant validation services, pending the development of a new generation of tools.

The Director, in his capacity as Authorising Officer by Delegation for the operational budget and Authorising Officer for the operating budget, has signed the Declaration of Assurance.

D. Provision of information to the Commissioner(s)

In the context of the regular meetings during the year between the Director and the parent DG(s) on management matters, the main elements of this report and assurance declaration, have been brought to the attention of the agency's Steering Committee and to the parent DG(s) Director(s) General.

IMPLEMENTATION OF THE AGENCY'S ANNUAL WORK PROGRAMME - HIGHLIGHTS OF THE YEAR

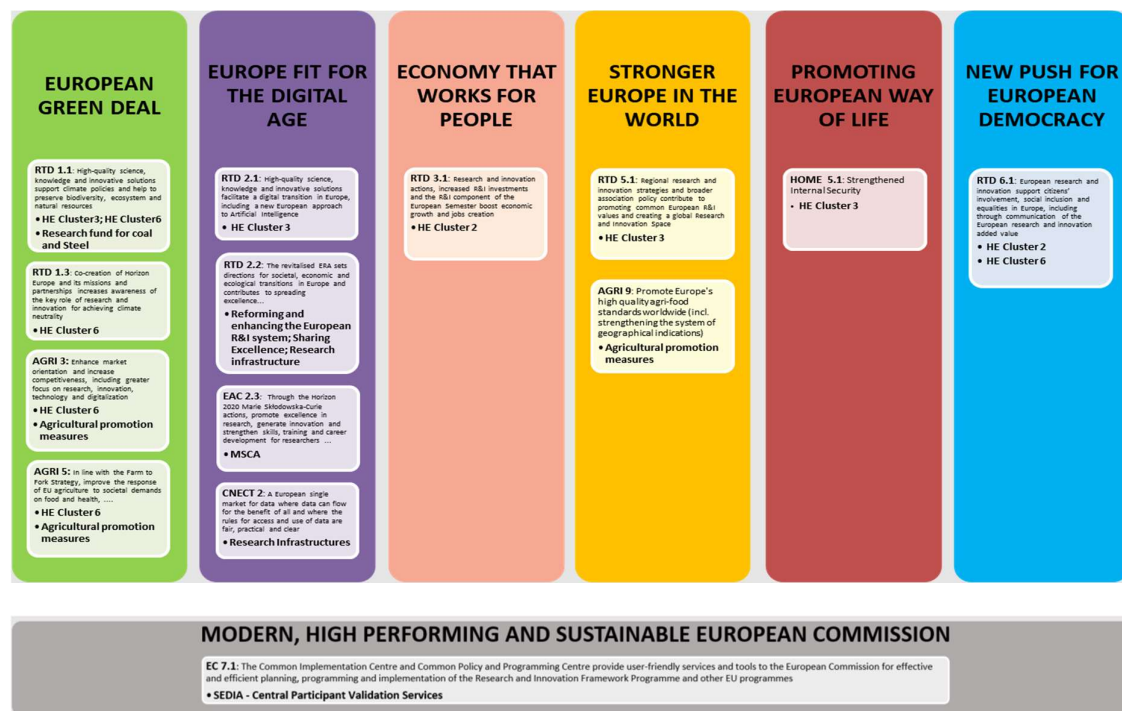
The report on the implementation of the Agency's Work Programme 2021 covers the programme implementation tasks and the various administrative and logistical support services. Before the sections devoted to the annual performance by programme part, some overall aspects, common to all the grant management activities, are presented below.

1) REA's contributions to achieving Commission priorities

REA works in close cooperation with its Steering Committee and parent DGs. The connections between REA-implemented programmes and the **objectives of the Commission**, both annual and multi-annual, are shown in Figure 4 below. The strategic priorities of DGs are structured according to the overall Commission objectives. Each programme part delegated to REA makes a direct contribution to at least one strategic priority of a parent DG for the period 2020-2024.

In addition, the parts of the REA portfolio that support multiple fields of research and innovation, such as widening participation and strengthening the European Research Area or Research Infrastructures, make contributions to other strategic priorities. These indirect contributions are also shown in the performance tables in Annex 2. Furthermore, the Marie Skłodowska-Curie Actions (MSCA), which cover a wide range of science and innovation topics, have the potential to support a variety of the Commission's objectives.

Figure 4 REA contribution to the EC priorities



2) Cross-cutting aspects relating to all REA activities

Main challenges faced during the reporting period

The past year was marked by the end of the REA mandate for the Multiannual Financial Framework (MFF) 2014-2020 and the start of the new mandate for the MFF 2021-2027. The reorganisation of the Agency and the delayed start of the new Horizon Europe programme (Council Decision adopted in May 2021) made 2021 a particularly challenging year. On one hand, significant staff mobility (management included) and a large number of grants transferred to REA (delegation of the H2020 legacy) affected many of the REA units, which were still working in a remote environment. On the other hand, the management of the 2021/2022 calls for Horizon Europe put significant pressure on REA services, in particular regarding budget implementation and the workload created by overlapping timelines for the various phases of the call and grant management processes. Furthermore, Horizon Europe calls included some new features that were piloted, such as the modified security screening and rebuttal processes.

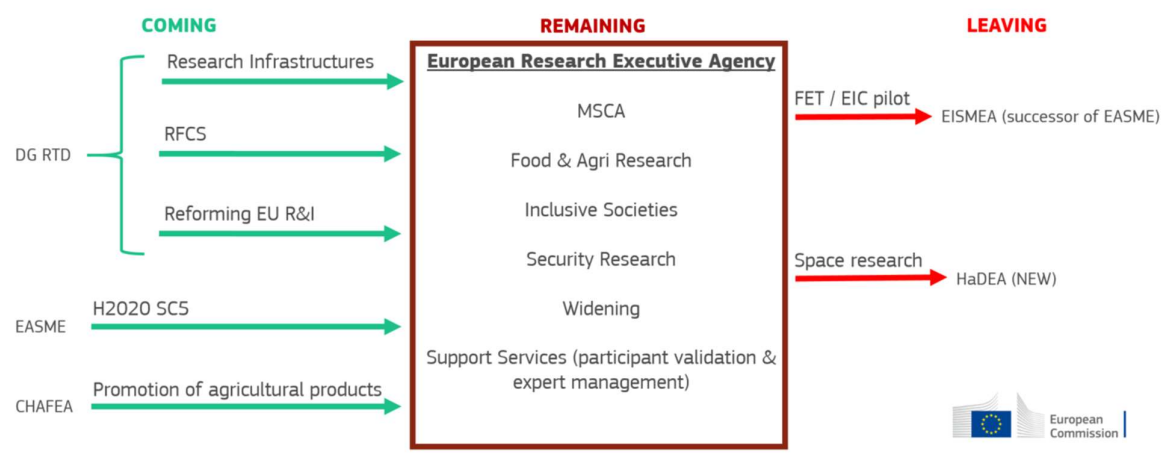
The Agency ensured a smooth transition thanks to its preparatory work and risk mitigating measures. This preparatory work also allowed for the integration of the new business areas into the organisation and the rapid launch of the Horizon Europe programme's implementation. The Agency's performance has been maintained and the operations are progressing according to the plans. REA continued to make or contribute to improvements in its main business processes, with a view to achieve efficiency gains and a coherent implementation of procedures across the Agency.

The COVID-19 pandemic continued to affect programme implementation in various ways. Beneficiaries requested a large number of project extensions or suspensions. This led to many amendments, a rescheduling of project reviews and payments and, overall, a longer time that projects remain in REA's portfolio, thereby increasing workload now and in future years. Moreover, the number of bankruptcies of beneficiaries is also expected to increase. Evaluations, project monitoring and events organised for the promotion of the programmes continued to take place remotely, without disruption in the implementation of the programmes.

Integrating new programme management activities and staff

Under the mandate for the MFF 2021-2027, REA accommodated several new activities. This required block transfers of staff from other services, who worked on the activities that the Agency took over.

Figure 5 Transition to REA's new mandate on 1 April 2021



The above developments triggered a major reorganisation in REA that meant integrating 62 new colleagues from two executive agencies: Chafea and EASME. 37 new staff were also integrated from DG RTD and DG CNECT. In addition, REA staff also needed to adjust to new assignments and ensure that the 'REA way of operating' continued and some staff moved to other units, thereby sharing their experience to newly created teams.

Throughout the year, various collaborative actions supported the transition. This included inter-agency working groups to prepare the transfers of projects and files; job shadowing to introduce staff to the Agency's operating environment; and coordination between new REA units to harmonise the approach for the delegated activities, the interaction with the Commission DGs, and so on.

External communication

According to the REA Delegation Act⁴, the Agency provides support to programme implementation, including establishing an information and communication strategy agreed with the parent DGs and in line with that of the Commission. This also involves planning and implementing communication and information activities.

During 2021, REA's external communication activities focused on the Agency's new mandate. Notable developments include the launch of the new website and of a LinkedIn account. Staff were also encouraged to become "digital ambassadors" of REA-managed programmes and projects. From its launch on 12 May 2021 to the end of the year, the REA LinkedIn account acquired 8 600 followers. The number of followers on the [@REA Research](#) Twitter account increased to 13 300. The [@EUGreenResearch](#) Twitter account counts more than 25 800 followers (3 128 new followers since REA took over the account).

⁽⁴⁾ (C(2021) 952 final)

Promotional activities covered: the [launch of Horizon Europe](#) and the adoption of the 2021-22 work programme; the launch of the first HE calls for [proposals](#); the [Info Days](#); the call results; as well as the launch of calls under the respective [EU Missions](#).

Together with DG EAC, REA co-organised a series of communication activities to celebrate the 25th anniversary of the Marie Skłodowska-Curie Actions, including articles in the [Horizon magazine](#) and on [REA's website](#), a Slovenian Presidency [conference](#), video clips, a [blog post](#) on on the Medium online publishing platform and general [social media promotion](#).

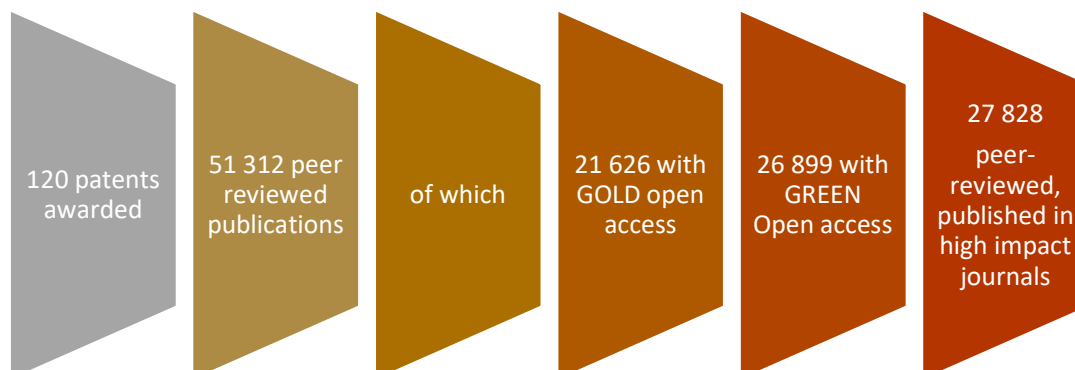
Figure 6 REA's new motto and visual for the mandate 2021-27



Dissemination and exploitation of project results

The projects funded by the R&I programmes generate results that contribute to the overall impact of the European research and innovation policy. In the case of REA's grant portfolio, the main result and impact indicators relate to publications and patents, with an important emphasis on the open access to the results published.

Figure 7 Cumulative results of the 14 173 grants managed by REA at end 2021



REA also contributed to the dissemination and exploitation of Horizon 2020 project results through various activities, such as cluster events and workshops. They were particularly

successful in terms of attendance and visibility on social media. More details are provided in the programme-specific sections below.

REA identified in its portfolio many success stories that fed into the R&I family activities such as the R&I Days, the Horizon magazine, and the Research*eu magazine. For the Mission “Restore our Ocean and Waters by 2030”, REA contributed to the publication of the first Synergy Info Pack highlighting EU funded projects linked to the Mission’s objectives. In addition, REA plays a full part in the creation of the Work Programme for this mission, using its knowledge of the portfolio of research projects already completed or underway, to avoid duplication and ensure the best use of existing results.

In cooperation with DG EAC, REA identified innovative and best practices in MSCA Innovative Training Network (ITN) projects, to better promote the projects’ success stories.

Support to shaping the Commission’s policy work

In 2021, REA engaged in the roll-out of the single Feedback to Policy framework of the R&I family in order to maximise the impact of funded projects on policy making. Connecting project results to policymaking remained a priority, with a particular emphasis given to portfolio analysis in terms of contributions to the five EU missions.

REA is the implementing service of the Horizon Europe project portfolio devoted to the EU Mission “Soil Deal for Europe”, which is intended to work towards soils in the EU being healthy for food, people, nature, and the climate. This Mission is designed to develop solutions that directly contribute to the European Green Deal and its ambition to progress on climate, biodiversity, and sustainable food.

The Agency also contributes to the other EU Missions. For example, cluster 6 is closely linked to the Missions on Adaptation to Climate Change, Restore our Ocean and Waters by 2030, and Climate-Neutral and Smart Cities. The Research Fund Coal and Steel, integrated within REA since 2021, also contributes to the transition towards a climate-neutral Union. Furthermore, the REA-managed MSCA grants on a wide range of science and innovation topics relate to various EU Missions and have a strong potential to provide targeted contributions.

In order to contribute to DG EAC’s specific objective of promoting scientific excellence and research careers across Europe, a specific feedback to policy plan was agreed, supported by the knowledge gathered from the MSCA projects.

Process improvements in grant management activities

The REA internal networks continued to establish and improve Agency-wide practices in different areas of call and grant management, including for new features under the new generation of programmes under the MFF 2021-2027. Any good practice developed is systematically shared within the R&I family and is often highlighted by the internal audits as a strength.

Examples in 2021 relate to experts' management (improving the IT support to remote consensus discussions and fully remote evaluations), to the handling of EU Classified Information in Horizon 2020 grants (updated REA guidelines, templates, checklists, and expert briefing material), or to seeking further efficiency gains through IT developments, process simplifications or better administrative practice.

The Agency further developed its capacity to handle cases of bankrupt beneficiaries, which are expected to increase in coming years. REA's new Centre of Excellence devoted to the handling of bankruptcy cases provides support to the operational units for the steps up to the establishment of the final claim, coupled with increased monitoring and reporting.

EU added value of the funded projects

On the following pages, eight success stories illustrate the contribution of the REA managed projects to the Commission's priorities.



A EUROPEAN GREEN DEAL

For sustainable maintenance of fertile soil in Europe - BEST4SOIL

The project has developed a knowledge network for [sharing best practices on soil health](#) for farmers via a user-friendly web tool that incorporates databases, videos and fact sheets. Informed farmers can sustain fertile soil levels in the fight against climate change, contributing to [EU Mission “A soil deal for Europe”](#).

Pioneering paper and pulp waste in building materials – PAPERCHAIN

The project turns paper ash into building materials such as cement enabling the sustainable re-use of waste in large scale trials for EU countries. By [turning waste into resources](#) it makes an important contribution to reducing landfills, protecting natural resources and cutting carbon emissions.



A EUROPE FIT FOR THE DIGITAL AGE

A cyber security shield for the protection of energy systems across Europe – PHOENIX

The project builds a harmonised cyber-security shield for [the protection of critical energy infrastructure](#) against large scale cyber-attacks across Europe via the sharing of information and best practices. Phoenix provides an armour against privacy and data breaches protecting the freedom of Europe’s citizens in the digital age.

A digital tool box for boosting creativity in children – DOIT

This project seeks to nurture creativity in 6-16 year olds by creating a digital toolbox that provides educational resources under an open licence. The [DOIT makerspace](#) could increase collaboration and skill sets for the next generation of entrepreneurs in a boost to European innovation and culture.



AN ECONOMY THAT WORKS FOR PEOPLE

Promoting academic research mobility through Marie Skłodowska-Curie Actions

2021 marked the [25th anniversary of the Marie Skłodowska-Curie Actions](#), having successfully funded 145,000 PhDs and postdocs. Through staff exchanges, such as the CURE-XF project, the programme gives researchers the mobility to study and co-operate in differing countries, enabling them to learn key new skills and make successful cross-border connections.



A STRONGER EUROPE IN THE WORLD

“MORE THAN FOOD” campaign in the Middle East

The [campaign](#) promotes European food and beverage products and raises awareness about their quality, authenticity and safety in the Middle East. The campaign film ‘More than Food, Great Stories to Share’ has won a [Silver Dolphin award](#) at the 11th edition of the Cannes Corporate Media and TV Awards under the category ‘Corporate Videos’.



PROMOTING OUR EUROPEAN WAY OF LIFE

A new early stage diagnostic process for Alzheimer’s and heart disease – PhotoChemBio

Supervised by [2021 chemistry Nobel Prize winner](#) Dr David MacMillan, the project facilitates early stage disease diagnosis in Alzheimer’s and heart disease. A new chemical diagnostic approach uses visible light to drive photoredox catalysis as a tool in order to identify important residue within proteins.



A NEW PUSH FOR EUROPEAN DEMOCRACY

Reconciling Europe with its Citizens through Democracy and Rule of Law – RECONNECT

Overlapping crises have caused a widening democratic disconnect between the EU and its citizens. RECONNECT seeks to plug the democratic deficit by identifying measures that can be taken to [improve the rule of law and stop democratic backsliding in Member States](#). The project contributes to the [Conference on the Future of Europe](#) by giving EU citizens the opportunity to speak up and shape a better Europe.

3) Programme implementation: key developments by programme part in 2021

The following chapter presents REA's main achievements for the programme parts that compose its portfolio. The sections follow the structure of the current mandate and also include the results for the legacy of the previous Research framework programmes.

Horizon Europe and the legacy of Horizon 2020

Marie Skłodowska-Curie Actions (MSCA)

REA key achievements in 2021



In 2021, under MSCA, REA completed the evaluation of eight Horizon 2020 and two Horizon Europe calls. Despite the delayed adoption of the work programmes and associated documentation, REA successfully evaluated the first calls for Horizon Europe. Moreover, application and evaluation guidelines and training materials were adapted to the requirements and features of Horizon Europe, such as the manual for evaluators, the e-learning tool for experts and vice-chairs, the training and manual for project officers (PO), the guide for applicants, the reworked Part B template, etc. These were prepared in close cooperation with the DGs EAC and RTD.

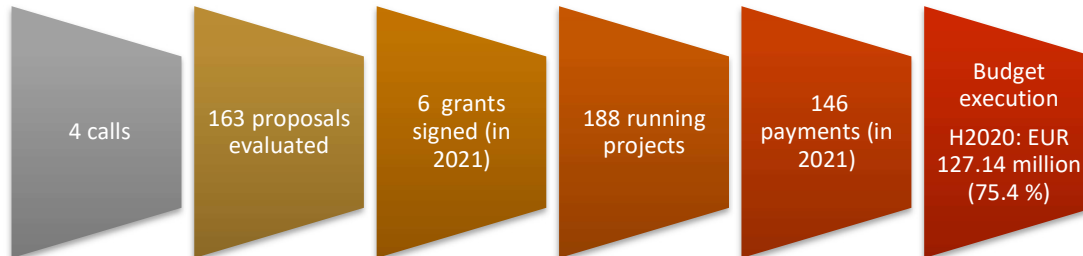
REA had a central role in the organisation of several important events and initiatives, in cooperation with Commission DGs. It received positive feedback, underlining the useful contribution to the further shaping of the MSCA programme:

- The MSCA-wide cluster on the European Green Deal, 6-7 July 2021 (more than 800 participants, 70 MSCA projects, six Commission DGs associated)
- The MSCA Cancer Cluster, 18-19 March 2021 (18 MSCA speakers, 30 MSCA posters, about 800 remote participants)
- Networking meeting of European Joint Doctorates, 9 November 2021 (more than 50 European Joint Doctorates presented to about 130 participants)
- The Individual Fellowships Webinar, 28 May 2021 (about 4 900 on-line participants)
- The COFUND-2020 Beneficiaries' Day, 3 June 2021
- The report on the impact of RISE projects funded under H2020 and the study on the innovative dimension of ITNs

Further details on the outputs of the MSCA programme implementation are included in Annex 2.

Cluster 2: Culture, creativity and inclusive society (and Societal Challenge 6)

REA key achievements in 2021



REA evaluated the proposals and signed the grant agreements for projects retained for funding from the last Horizon 2020 calls. It involved managing two topics of the European Green Deal call that will support citizens' participation and behavioural/social/cultural change. Significantly more proposals than forecasted were submitted, which explains the low success rate of the call. Nevertheless, the evaluation ran smoothly and all grant agreements were signed on time.

RTD transferred to REA 33 Horizon 2020 grants funded under Societal Challenge 6. The transfer included also the action 'Support to the engagement of European Citizens in the transition to the European Green Deal', managed through a direct service contract. The procurement procedure was finalised and its implementation is running smoothly.

The first four calls of the Horizon Europe – Cluster 2 programme have been successfully launched. Except for one of the calls, the evaluation stage will be closed in 2022.

Cluster 3: Civil security for society (and Societal Challenge 7)

REA key achievements in 2021



Five calls for proposals under Horizon Europe were successfully closed. The evaluation of the proposals will be concluded by the beginning of 2022. The last call of Horizon 2020 saw a very high number of submitted proposals. In 2021, the number of the managed projects in the area increased by about 30% compared to 2020.

To boost effective feed-back to policy and dissemination and exploitation of project results, REA organised a Project-to-Policy Kick-Off Seminar. REA and DG HOME co-organised this

event to which all the coordinators of the 43 newly launched projects from the 2019 call were invited to present their projects to the relevant policy DGs who provided guidance to the new projects regarding the policy-related outputs they are interested in.

Cluster 6: Food, bioeconomy, natural resources, agriculture and environment (and Societal Challenge 2 and 5)

REA key achievements for 2021



Call and grant management processes were carried out simultaneously during 2021.

The agency implemented a significant part of the European Green Deal Call, the last call of Horizon 2020. The evaluation of proposals was impacted by the oversubscription of several topics.

Despite the delay in the adoption of the Horizon Europe programme, the implementation of Cluster 6 calls started well. The *governance* call received a smaller than expected number of proposals. Given the low submission rate, it was not possible to spend the budget as initially allocated by topic. After a first budget reshuffling within the call, the remaining budget was used to fund high-ranked proposals in other Cluster 6 calls.

In the area of communication, dissemination and feed-back to policy REA undertook a number of activities promoting the new calls for proposals, following the progress of the on-going projects, providing information and support to policy related decision making. These activities included, among other,

- A wide range of project clustering meetings (on soil, livestock health, plant health, digital solutions for water, circular economy, marine litter, nature based solutions and health and wellbeing in cities);
- Six CORDIS results packs (on rural innovation, soil, plant health, agroecology, circular economy and water innovation in Africa);
- Several policy sessions organised jointly with the policy DGs (on marine biological resources, circular food systems, forest ecosystems, EU-China and EU-Africa cooperation, the circular economy in aquaculture).

Highlight: EU Mission “A Soil Deal for Europe”

REA has been fully involved in the development and the launch of the EU Mission ‘A Soil Deal for Europe’. This Mission aims to engage with people and create an effective partnership across sectors and territories to protect and restore soils in Europe and beyond. It contributes to the European Green Deal targets relating to sustainable farming, climate resilience, biodiversity and zero-pollution. REA has contributed to the preparation of the implementation plan of this mission by working together with the Mission Owners Group to set out detailed actions including the investment strategy and performance indicators. In 2021, the agency participated in numerous fora developing the Soil Mission work, notably the Strategic Programme Committee, the Mission Owners Group, the Mission Board Selection, the Artificial Intelligence Matrix and the Horizon Results Booster.

Cluster 6 of Horizon Europe provides a major part of the financial contribution to this Mission. In 2021, the first Mission call was launched, including a new public procurement action; its evaluation took place in December 2021. REA also contributed to the Mission Work Programmes, ensuring a balanced distribution of the topics.

Widening participation and spreading excellence (SEWP)

REA key achievements in 2021



REA successfully managed to launch six calls for proposals and two invitations to submit proposals to identified beneficiaries under Horizon Europe. REA also successfully completed the evaluation calls: the Twinning Western Balkans and the Teaming for Excellence (1st stage). The evaluation of the European Excellence Initiative call is under way.

The Agency also took over responsibility for managing the Horizon Europe Framework Partnership Agreement (FPA) and Specific Grant Agreement (SGA) for the implementation of the COST (European Co-operation in Science and Technology) actions, previously managed by DG RTD.

Alongside managing a portfolio of 218 projects, REA conducted a wide range of activities on policy feed-back and dissemination and exploitation of project results, such as:

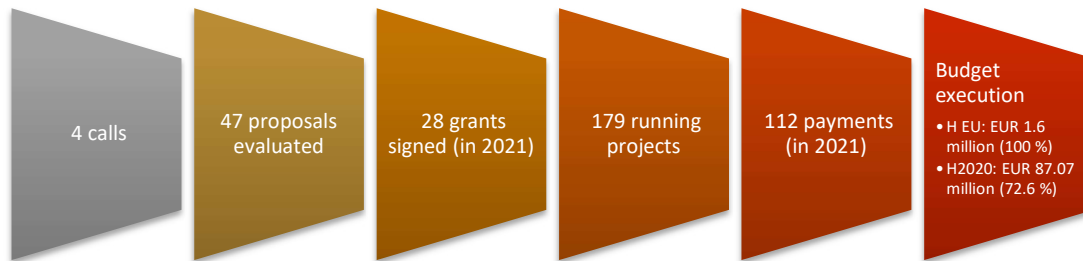
- The [H2020 SEWP Impact Report with outlook to Horizon Europe](#) provided DG RTD with a better understanding of the overall Widening context and emerging trends as well as valuable input to the Horizon Europe Work Programmes.

- The Cluster event “*Sustainable Agriculture and Natural Resources*” (20 May 2021); a successful event with over 100 participants, including National Contact Points, DG RTD and DG AGRI.
- Updated country factsheets (for Widening Member States and Associated Countries) and flow maps for ERA Chairs.

Reforming and enhancing the EU R&I system

This programme-part includes the successor of the Horizon 2020 Science with and for Society programme (SwafS), with an extended scope ranging from universities to international cooperation. The new programme focuses on prioritising investments, improving access to excellence, translating R&I into economic value and deepening the European Research Area (ERA).

REA key achievements in 2021



REA finalised the final two Horizon 2020 calls on Science with and for Society and successfully carried out the main Horizon Europe call in this area. The latter received only 44 proposals. The three other calls were invitations to identified beneficiaries to submit a proposal.

The agency held a workshop for beneficiaries of the SwafS programme to discuss how to encourage open science and societal engagement in universities and research organisations. It results in the publication of a report containing 5 key recommendations for the European Research Area.

Research infrastructures

REA key achievements in 2021



Under Research Infrastructures in the Horizon Europe programme, REA implemented four calls with invitations to Identified Beneficiaries to submit proposals, as well as four open calls for proposals. The evaluation of those calls went according to the planned timetables, including two fast-track procedures.

REA organised, in cooperation with DGs RTD and CNECT, the Info Day on the Horizon Europe Research Infrastructures programme, on 28 June.

Moreover, a *Library Talk* took place in DG RTD on “Renewable energy, storage and smart grids: the impact of Research Infrastructures”. It presented two Research Infrastructures projects (EriGrids 2.0 and EnAbles), specialised in self-powered smart sensor energy systems and smart grids. These two projects showcased both industry-academia collaboration and industrial ecosystem building, which are key enablers for achieving the major objectives related to the green and digital transitions.

Research programme of the Research Fund for Coal and Steel

REA key achievements in 2021



REA completed the evaluation process for two calls launched in 2020; one for *Coal* and one for *Steel*. A delay in the approval of the calls' Financing Decision⁵ by the Commission affected implementation with delays in the signature and pre-financing of some projects.

REA also launched and completed the evaluation of the two calls in 2021 within the time limits. The changes in the legal base governing RFCS required a thorough revision of the information pack for applicants, and various changes in procedures and forms. The results of the evaluation were presented to the Coal and Steel Advisory Groups (CAG and SAG) and communicated to the Programme Committee.

Due to the delayed approval of the new RFCS legal basis, the budget available for these calls was limited to the revenue from the RFCS asset, i.e. EUR 13 million. The new legal base, fully effective from 2022, will allow for more calls and an enhanced budget of over EUR 100 million per year. One of the new features will be the support to the co-programmed Clean Steel Partnership (CSP). The research undertaken to support the CSP will be funded from the RFCS and from Horizon Europe, cluster 4. Having research funded for the same objective, but from different sources, requires some changes in the monitoring procedures for the programme. In particular, the Technical Groups, which perform a valuable and high quality monitoring of RFCS projects, should also be able to consider the CSP projects funded from Horizon Europe. In 2022 proposals will be brought forward to enable the Technical Groups to perform this review, and to ensure an effective dissemination of results. A similar issue arises for coal projects, where the Just Transition Fund may fund similar projects.

To ensure effective dissemination of the results of projects, the 'RFCS Synopsis of project 2018-2021' was published on the [RFCS webpage](#), (section 'Documents'). An effective dissemination and exploitation of results from the RFCS and related programme will be a focus of attention in 2022.

⁽⁵⁾ COMMISSION IMPLEMENTING DECISION on the award of grant(s) under the Research Programme of the Research Fund for Coal and Steel (RFCS) DL/2021/5386 - RTD - 09/07/2021

Information provision and promotion measures concerning agricultural products (AGRIP)

REA key achievements in 2021



By 1 April, REA, in close interaction with Chafea, successfully managed the transfer of the AGRIP portfolio including 85 grants, eight procurement framework contracts and 20 specific contracts from Chafea to REA.

The response to the two AGRIP calls for proposals published in 2021 increased compared to 2020; by 16% for multi-beneficiary/multi-country (MULTI) calls and by 9% for mono-beneficiary (SIMPLE) calls. For the latter, the evaluation results were provided to DG AGRI, which will further coordinate the signature and monitoring of grants through shared management with Member States. The increased participation to the programme was achieved through a number of promotional measures, among them the organisation of the AGRIP Info Day on 28–29 January 2021 and the participation of speakers in six Info Days organised by Member States.

To facilitate the administration and reporting of the co-funded projects, a Coordinators' Day was organised on 7 December 2021.

Throughout the reporting period, at a request of DG AGRI, REA contributed to the on-going review of the EU promotion policy concerning agricultural products, by participating actively in the related discussions and providing input to and comments on the draft impact assessment prepared by DG AGRI.

In the area of public procurement 14 specific contracts were signed under the existing single framework contracts. Four contracts were awarded as a result of the four procedures for reopening of competition under the existing multiple framework contracts. A call for tender for an inter-institutional framework contract for organisation of promotion events and campaigns and market intelligence in third countries was published by REA who is the lead contracting authority. The contract will be used in the period of 2022–2026, mainly outside the EU. According to the MoU signed with the EC, Commission DGs, in particular DG AGRI, are expected to use the FWC as well.

4) Support tasks delegated to the Agency

REA provides support according to the Annex VIII of the Delegation Act. The following sections report the highlights from the implementation of these services in 2021. Detailed tables showing progress towards meeting operational targets are given in Annex 2.

REA's role as a provider of support services comprises⁶ **contracting and payment of expert evaluators** for the research and innovation framework programme and **participant validation services** for all Commission services. The Research Enquiry Service, coordinated by REA, manages the information requests about validation and the research framework programmes for all participants.

Centralising these services at REA contributes to synergies, economies of scale and simplification for programme participants.

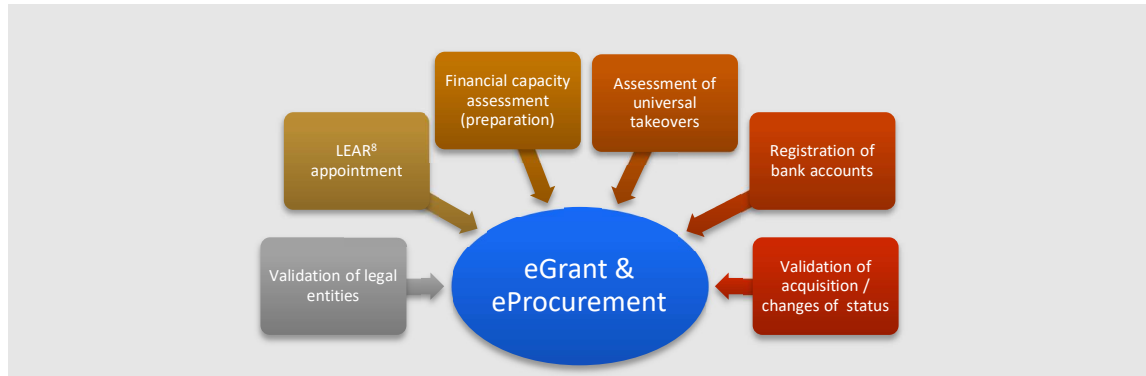
The Agency offers its participant validation services at corporate level to the Commission services, executive agencies and joint undertakings that implement grants and procurements under direct management.



This activity takes place within the Single Electronic Data Interchange Area (SEDIA) framework. SEDIA provides call applicants and tenderers with a single-entry point to communicate and exchange information with the Commission services. It ensures the alignment and the reusability of participant data and contributes to build a central repository of data of external stakeholders who conduct business with the Commission.

⁽⁶⁾ The Annex VIII of Agency's outlines the list of support services and beneficiaries of the services provided by REA. [delegation act](#) outlines the list of support services and beneficiaries of the services provided by REA.

Figure 8 Services provided by the validation services

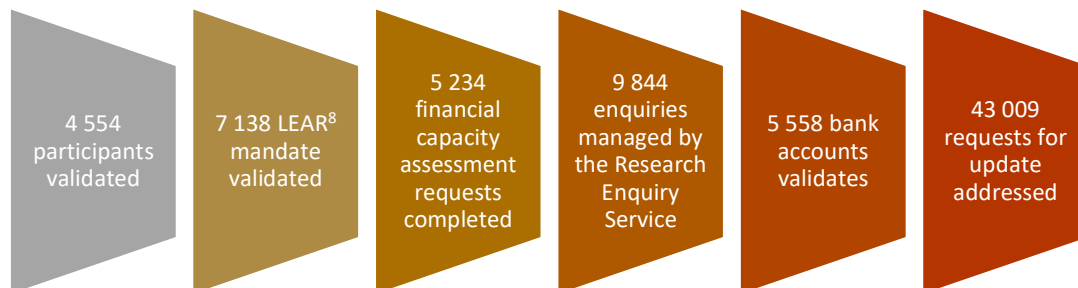


REA also provides expert management and support services to EU bodies implementing Horizon Europe and selected other programmes.

Figure 9 Overview of support services centralised in REA



REA key achievements in 2021 for the participant validation services



REA continued to meet the target of its KPI on timely participant validation. The delay in the adoption of the new Multiannual Financial Framework (MFF), the new funding programmes, and their work programmes, and the launching of the corresponding calls meant that the number of files to handle throughout the year was lower than expected.

The IT environment supporting the central participant validation service was further improved. Firstly, the participant register is now a multilingual interface that provides

⁷ Legal Entity Appointed Representative (LEAR)

translations of screens, documents and messages in all EU official languages. Secondly, the financial capacity assessment activities migrated to the corporate workflow system, for a more efficient follow-up of the status of the requests received.

The new REA Delegation Act extends the mandate of the central participant validation service to also cover the assessment of mid-capitalisation enterprises and the ownership/control of entities applying for funding under the Horizon Europe, Digital Europe, European Defence Industrial Development and EU Defence Fund programmes.

REA key achievements in 2021 for the call planning and experts management services



With the pandemic persisting through 2021, it remained impossible to host experts on-site. REA focused on providing support to call coordinators for the execution of fully remote evaluation. It included works to transform meeting rooms into hybrid meeting rooms and deploying equipment to host hybrid evaluations and prepare for the *post-pandemic* use of the evaluation platform.

During the first semester, considerable time and effort was devoted to adapting the call planning for 2021-22 following delays in the start of the new Horizon Europe programmes.

These delays led to an increasing number of call deadlines in September and toward the end of the year. As a consequence, REA issued 60% of the expert contracts in the last quarter of 2021 and 50% of the payments to experts were made in November and December. In spite of peak workload periods, REA maintained high performance with contracts signed on time in 99% of the cases and payments made timely.

MODERN AND EFFICIENT ADMINISTRATION AND INTERNAL CONTROL

This section explains *how* the Agency 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 management's assurance on the achievement of the financial management and internal control objectives⁸.

The second subsection deals with the other components of organisational management, namely human resources, digital transformation and information management, and environmental management.

2.1. Financial management and internal control

Assurance is provided on the basis of an objective examination of evidence 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 Director-General. The following reports have been considered:

- the bi-annual reports submitted by the Heads of Unit and endorsed by their Head of Department, in their capacity as Authorising Officer by Sub-Delegation (AOSD);
- the reports on recorded exceptions, non-compliance events and internal control weaknesses;
- the opinion on the state of control of REA's officer responsible for Risk Management and Internal Control (RMIC);
- the outcome of activities of the ex-post audit function and fraud prevention measures;
- the limited conclusion on the state of control and the observations and recommendations reported by the Internal Audit Service (IAS);
- the observations and recommendations reported by the European Court of Auditors;
- the observations and recommendations reported by DG BUDG (in the context of the validation of the local accounting systems by the Commission's Accounting officer);
- The conclusions from the REA's accounting officer following its validation of local accounting systems supporting the management of REA's administrative budget;
- the reports on REA's risk assessment exercises;

⁽⁸⁾ 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

- the registers of security and data breaches.

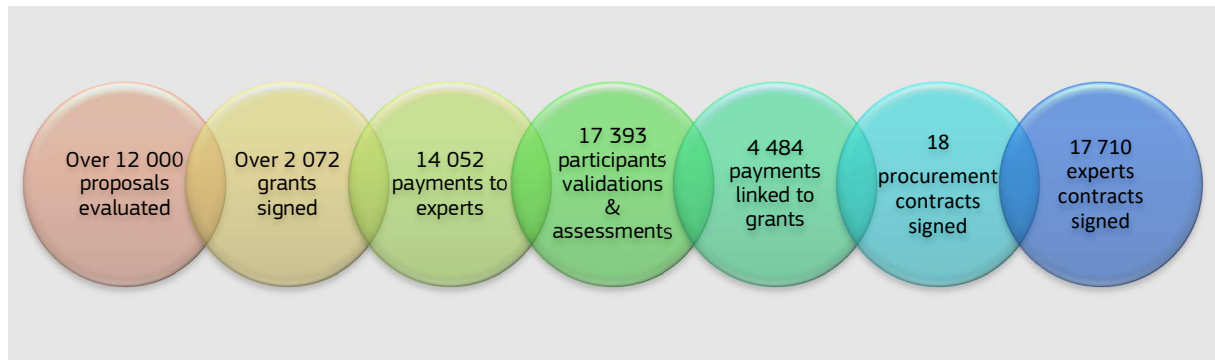
These reports result from a systematic analysis of the available evidence. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in a complete coverage of the budget delegated to the Director of REA.

This section covers the control results and other relevant elements that support management's assurance. It is structured into 2.1.1 Control results, 2.1.2 Audit observations and recommendations, 2.1.3 Effectiveness of internal control systems, and resulting in 2.1.4 Conclusions on the assurance.

Scope of the controls

In 2021, REA implemented an overall budget of EUR 2 392.09⁹ million consisting of the operational budget of EUR 2 304.22 million and the administrative budget of EUR 87.88 million. While the budget execution covers the period from 01 January 2021 until 31 December 2021, the programmes formerly managed by REA and transferred to other Executive Agencies, i.e., FET-OPEN and SPACE, are not included in this report. Inversely, the new programmes transferred to REA, e.g., H2020-Societal Challenge 5, H2020-INFRAstructures, RFCS and AGRIP, are included in the budget execution as from 01 January 2021.

Figure 10 - REA activities in 2021, managed under the various control systems



Controls are implemented for direct grant management, for expert management, and for the validation of participants in EC funding programmes. The latter is part of the Commission's corporate control environment and does not relate to any operational expenditure implemented by REA. In 2021, a limited part of the operational budget was also spent via public procurement, following the transfer of the AGRIP activities to REA.

The control environment for direct management (mostly grant spending) in which REA operates is largely a corporate one. The results reported in the following sections are the outcome of controls designed principally by the Common Implementation Centre (CIC) in charge of control system for the R&I framework programmes. REA actively participates in the various governance structures put in place by the CIC and contributes to the development

⁹ Expressed in payments made

and continuous improvements of the common legal framework, the business processes and IT tools. Moreover, REA integrated into its control environment the RFCS and AGRIP initiatives transferred to REA in 2021.

Certain control activities carried out in REA cannot be fully captured by quantitative indicators, while they significantly contribute to the overall benefits of the programme implementation or the centralised support services delivered to the Commission services. These activities include feedback for joint policy making, process improvements, information and communication, dissemination and exploitation of the project results, etc..

2.1.1. Control results

This section reports and assesses the elements identified by management which support the assurance on the achievement of the internal control objectives (ICO) ⁽¹⁰⁾. The Agency's assurance building and materiality criteria are outlined in the AAR Annex 5. The AAR Annex 6 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.

Effectiveness of the controls is demonstrated by the control results regarding the legality and regularity of the operations, fraud prevention, and other control objectives – in particular the safeguarding of assets. The most pertinent results are the error rates detected by ex post audits covering the main expenditure items (grants). They constitute REA's fourth Key Performance Indicator.

The efficiency of REA's operations is to be analysed in the light of the volume of activities performed and their quality and timeliness. Indicators such as Time to Grant and Time to Pay are also among REA's Key Performance Indicators, and the financial scoreboard in Annex 4 includes others.

The chapter dedicated to the economy of the controls gives account of the investment needed to achieve the results reported above.

Finally, a conclusion regarding the cost-effectiveness of REA's operations is drawn, based on the previous elements.

⁽¹⁰⁾ 1) Effectiveness, efficiency and economy of operations; 2) reliability of reporting; 3) safeguarding of assets and information; 4) prevention, detection, correction and follow-up of fraud and irregularities; and 5) adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments (FR Art 36.2). The 2nd and/or 3rd Internal Control Objective(s) (ICO) only when applicable, given the DG's activities.

Table 1 Overview table (amounts in EUR million)

Risk-type / Activities	Grants (e.g. actual costs based, or lump sums, or entitlements)	Procurement (e.g. minor or major values)	Shared mgmt (MS's OPs, PAs, etc) + EAC (for NAs)	Cross-delegations to other DGs (other AOXDs)	Contributions and/or funds to EE (EU Agency, EA, JU)	Delegation / Contribution agreements with EE (EIB, Int-Org, etc)	Other (describe any other expenditure not covered by the previous columns)	Total Expenditure	NEI, e.g. Revenues, Assets, OBS ((in)tangible or financial assets & liabilities)
Total Horizon Europe	94.76							94.76	
RFCS	34.46							34.46	
AGRIP	41.70	11.58						53.28	
H2020	2 091.70							2 091.70	
FP7	1.83							1.83	
Totals (coverage)	2 292.63	11.58						2 304.21	
Links to AAR Annex 3	Overall total (m EUR); see Table 2 – payments made 2 304.21¹¹						Overall total (m EUR)	n/a	Table 4 – assets

¹¹ Excluding administrative expenditure.

In line with the 2018 Financial Regulation, REA's assessment for specific reporting requirements is as follows:

- REA had no cases of '**confirmation of instructions**' in 2021 (new FR art 92.3)
- In Horizon 2020 and Horizon Europe, there are no cases of financing not linked to costs (new FR art 125.3).
- With respect to **cases of flat rates for indirect costs >7%**¹², according to the Horizon 2020 and Horizon Europe Rules for Participation¹³, eligible indirect costs of Horizon 2020 and Horizon Europe grants are determined by applying a flat rate of 25% of the total eligible direct costs.
It is the basic act that derogates from the Financial Regulation. This applies to all Horizon 2020 and Horizon Europe grants. However, in some cases, the indirect costs are included within a larger unit cost or lump sum and the percentage of indirect costs cannot be determined separately (e.g. the unit costs for institutional costs under the Marie Skłodowska-Curie actions).
- In Horizon Europe, four grant agreements signed in 2021 **derogated from the principle of non-retroactivity** pursuant to Article 193 of the Financial Regulation. 52 Horizon 2020 grant agreements signed in 2021 derogated from the principle of non-retroactivity pursuant to Article 193 of the Financial Regulation. In each case, the project start date preceded the grant signature date, which is compliant with the Horizon programme's legal framework. No granted project started prior to the submission date of the proposal.
- Four Financial Framework Partnerships for the COST programme have a duration of more than four years¹⁴. They are specified in Annex 7.4

⁽¹²⁾ FR Article 181.6

⁽¹³⁾ Article 29 of Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020)" and Article 39 Regulation (EU) 2021/65 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination.

⁽¹⁴⁾ FR art 130.4

1. Effectiveness of controls

Control results are detailed here regarding the legality and regularity of the operations, the fraud prevention and other control objectives, in particular the safeguarding of assets. The benefits of the controls are summarised for the direct grant management and for the support services.

a) Legality and regularity of the transactions

REA uses 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.

The results of the controls implemented are measured through ex-post audits and ex-post controls carried out on transactions of the REA's operational budget, which in 2021 represent 95.19% of the total relevant expenditure. Control results are detailed below for the Horizon 2020 programme and the expert related spending. REA's administrative expenditure amounts to 4.81% of the total relevant expenditure in 2021. Based on the European Court of Auditors' clean opinion on REA revenues and payments underlying the accounts for 2020, REA retains for this segment an error rate of 0.5%, as a conservative estimate.

Information about the audit work performed in 2021 is also included in Annex 7.

Ex-post control results for grant management

Since 2007, the R&I Family has adopted a common audit strategy (through ex-post controls) intended to ensure the legality and regularity of expenditure on a multi-annual basis, including detection and correction of systematic errors.

For Horizon 2020, the Common Audit Service of the Common Implementation Centre carries out all audits, including those concerning grants concluded by the Executive Agencies and the Joint Undertakings. This is a major step towards ensuring a harmonised approach, legal certainty, equality of treatment and minimising the audit burden on beneficiaries.

The **main indicators** on legality and regularity¹⁵ of EU Framework Programmes for Research and Innovation are:

- **Representative detected error rate**, based on errors detected by ex-post audits on a Common Representative Sample of cost claims across the R&I Family.
- **Cumulative residual error rate**, which is the extrapolated level of error after corrective measures have been implemented by the managing services following the

¹⁵ These indicators are described in point 1.1 of annex 5

audits, accumulated on a multi-annual basis.

The **targets** set for this control system are:

- for the Seventh Framework Programme for Research and Innovation (2007-2013, 'FP7') and the Research Fund for Coal and Steel, 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, to obtain a cumulative residual error rate within a range of 2-5 % aiming to be as close as possible to 2%.

Progress against Horizon 2020 targets 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 and along with cost-benefit considerations regarding the effort and resources needed to detect and correct the errors.

- for Horizon Europe, to ensure that the cumulative residual error rate does not exceed 2%¹⁶.

It should be noted, however, that due to its multi-annual nature, the effectiveness of the control strategy of the R&I Family can only be measured and assessed fully in the final stages of the EU Framework Programme, once the ex-post control strategy has been fully implemented, and errors, including those of a systematic nature, have been detected and corrected.

Due to the COVID-19 pandemic crisis and related travel limitations during 2021, the Common Audit Service (CAS) – in line with the instructions of the Commission – could not carry out the necessary on-the-spot missions and had to postpone some of them. To minimise the impact of COVID-19 on the implementation of the audit campaign, the CAS converted as many traditional audit assignments as possible into desk audits, in line with international best practice and auditing standards.

Despite restrictions and other objective challenges due to the COVID-19 pandemic, the planned audit target was achieved. The CAS managed to finalise audits on 514 participations corresponding to the 104,3% of the planned most probable scenario for the 2021 target¹⁷.

¹⁶ No representative error rate for Horizon Europe will be available in 2022 and 2023 as the ex-post audit campaign for the Programme is planned to be launched by the end of 2023, at the earliest.

¹⁷ Given the COVID-19 pandemic and related restrictions, the CAS developed several scenarios for the closure of audit targets.

Results of the Seventh Framework Programme ex-post audits

The error rates based on the audit work for the Seventh Framework Programme for Research and Innovation until 31 December 2021¹⁸ were:

- Representative detected error rate: **5.44%**¹⁹
- Cumulative residual error rate: **1.54%** for MCA and **3.91%** and **5.75%** for the Security and SME programmes respectively

The target of cumulative residual error rate below 2% was not attained. Nevertheless, the lessons learned from the Seventh Framework Programme's audits contributed significantly to the development of the enhanced Horizon 2020 control framework.

In 2019²⁰, a 'de minimis' threshold for financial reservations was introduced stipulating that quantified Annual Activity Report reservations related to residual error rates above the 2% materiality threshold are deemed not substantial for segments representing less than 5% of a DG's total payments and with a financial impact of the residual error rate below EUR 5 million. As is the case for the Seventh Framework Programme expenditure²¹, a quantified reservation is no longer required.

Results of the Horizon 2020 ex-post audits

In 2020, the Commission re-defined its methodology for calculating the Horizon 2020 error rates in line with the European Court of Auditors' observations in its 2018 and 2019 Annual Reports²². The methodology applied is described in Annex 5 'Materiality criteria'. As of January 2020, DG R&I applied the revised methodology on a sample of 1 304 audit conclusions. This results in the following error rates for Horizon 2020²³ on 31 December 2021:

¹⁸ The last Common Representative Sample for the Seventh Framework Programme for DG R&I was launched in 2016. With all Common Representative Sample items closed, the audit strategy for the Seventh Framework Programme was already considered to be fully implemented in 2020. The audit coverage for the Seventh Framework Programme is presented in Annex 7..

¹⁹ This is based on 481 cost statements for which the audit has been completed.

²⁰ Agreement of the Corporate Management Board of 30 April 2019.

²¹ The affected FP7 payments represent 0.05% of payments made in 2021 and the financial impact of the residual error rate is EUR 175 552.

²² When calculating the multi-annual error rate, the Commission took into account the results of the audit re-performed by the ECA as part of Module 2 of the DAS 2018-2019.

²³ The Horizon 2020 audit campaign started in 2016. At this stage, four Common Representative Samples with a total of 629 expected results have been selected. By the end of 2021, cost claims amounting to EUR 31.8 billion have been submitted by the beneficiaries to the services. The audit coverage for Horizon 2020 is presented in annex 7. In addition to the Common Representative Samples, Common Risk Samples and Additional Samples have also been selected. The audits of 3 424 participations were finalised by 31/12/2021 (of which 514 in 2021).

- representative detected error rate: **2.29%**²⁴
- residual error rate for REA of **1.75%**. (residual error rate for the Research and Innovation Family overall: 1.60%).

These figures reflect the so called 'first layer' sample covering the Research and Innovation Family and presenting the outcomes relevant for non-MSCA. In addition to the information provided by the CRS, REA takes into account the outcome of audits on a "second-layer" audit strand focusing on participations to MSCA.²⁵ As a result, a local error rate is reported specifically for this part of Horizon 2020:

- representative local detected error rate for MSCA: **0.56%**
- residual local error rate for MSCA: **0.50%**

Detailed information relating to the ex-post audit work that provided the above results and the state of play of the implementation of the audit findings, including the extension of systematic errors, are included in Annex 7.

The error rates presented above should be treated with caution. Since not all audit results are available yet, the error rate is not fully representative of the expenditure under control.

In line with the Financial Statement²⁶ accompanying the Commission's proposal for the Horizon 2020 regulation, a reservation is not necessary for the related expenditure if the cumulative residual error rate for the programme falls within the target range of 2-5%. In 2021, and despite the above-mentioned caveats, the REA cumulative residual error rate for Horizon 2020, calculated at 1.75%, more than fulfils this condition and is below the materiality threshold. Despite the absence of reservation, the root causes of errors have been identified and targeted actions taken to address any identified weaknesses.

Since Horizon 2020 is a multi-annual programme, the error rates, and the residual error rate in particular, should be considered within a time perspective. Specifically, the cleaning effect

²⁴ Based on the 418 representative results out of the 629 expected in the four Common Representative Samples.

²⁵ Two samples were audited in 2021: the MSCA local representative sample and the MSCA local risk sample. So far, 232 (87.2%) out of 266 launched audits have been completed for the representative sample.

²⁶ The legislative financial statement accompanying the Commission's proposal for the Horizon 2020 regulation states: "The Commission considers therefore that, for research spending under Horizon 2020, a risk of error, on an annual basis, within a range between 2-5% is a realistic objective taking into account the costs of controls, the simplification measures proposed to reduce the complexity of rules and the related inherent risk associated to the reimbursement of costs of the research projects. The ultimate aim for the residual level of error at the closure of the programmes after the financial impact of all audits, corrections and recovery measures will have been taken into account is to achieve a level as close as possible to 2%."

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.

These error rates are calculated on the basis of the audit results available when drafting the Annual Activity Report. They should be treated with caution as they may change subject to the availability of additional data from audit results.

The decrease of the error rates in year 2021 could be due, among other reasons, to the beneficiaries' increased knowledge of the eligibility rules and its inherent learning curve, as well as to the results of the communication campaigns, targeted webinars and trainings, addressed in particular to newcomers and SMEs.

Given the results of the audit campaign up until 2021, and the observations made by the European Court of Auditors in its Annual Reports, the Common Implementation Centre, in close cooperation with central Commission services, is defining actions aimed at significantly simplifying the rules, and paving the way for a significant reduction of the error rate in Horizon Europe. Actions include further simplification, increased use of simplified forms of funding (including lump sums and unit cost), focused communication campaigns to more "error-prone" types of beneficiaries with higher than average error rates, such as SMEs and newcomers, and enhanced training to external audit firms performing audits on behalf of the Commission (the last three measures also target H2020 grants and beneficiaries). Focusing on the most common errors, these events will be short and simple, reaching more participants and achieving higher impact.

In the context of further reducing the error rates, the Common Implementation Centre will revisit the existing tools for ex-ante controls. It will consult the stakeholders in order to collect their views on possible improvements in the grant management risk module.

Horizon Europe

2021 was the first year of implementation of the Horizon Europe framework programme. The adoption of its Regulation later than initially planned, delayed the starting of its implementation. By the end of 2021, only a very limited number of payments was executed (mainly pre-financings).

Consequently, taking into account the immaterial level of the relevant expenditure²⁷, the low-risk nature of the implemented transactions and the absence of ex-post audit results for grants, a rate of 0.5 % is a fair estimate of the Horizon Europe detected error rate in 2021.

²⁷ REA Horizon Europe relevant expenditure amounted to EUR 1.2 million, that is less than 0.07% of the total relevant expenditure.

Results of the Research Fund for Coal and Steel ex-post audits

The RFCS programme was transferred to REA on 1 April 2021 and is implemented under a control system similar to the current research framework programmes, including ex-post audits performed by the CAS. Under the current RFCS ex-post audit strategy (2018-2024), audits on 9 participations have been finalised, resulting in a cumulative detected error rate of **0.18%**.

Given the relatively low share of RFCS in REA's total expenditure, investments in ex-post audits have remained limited. With a low number of audit results available and the assumption that the exposure for RFCS is comparable to H2020, this result is considered to be a relevant but preliminary estimate. Following a conservative approach for the calculation of the amount at risk, REA will refer to the control results of the previous RFCS audit strategy (under FP7): a detected error rate of **4.26%** and a residual error rate of **3.13%**. As the number of audits rises a more accurate estimate will be given.

Given the low share of RFCS in the overall expenditure (1.49%) and the very low financial impact of the errors (EUR 1.15 million), no reservation is needed according to the "de minimis" rule.

Results of the ex-post audits on Information provision and promotion measures concerning agricultural products (AGRIP)

AGRIP was taken over from CHAFEA on 1 April 2021. It is implemented through different funding mechanisms, grants (95%) and procurements (5%). In order to integrate this activity into its control system, REA developed a specific control strategy for AGRIP. According to this strategy, ex-post controls should take into account the followings.

- For grants for promotion initiatives within Europe, given the limited size of the population of running grants, the relative high share of the grant covering subcontracted services²⁸, and the stability of the programme design, a limited sample²⁹ of ex-post audits is deemed appropriate. REA will use results from audit campaigns over a rolling window of 5 years to provide estimates on error rates.
- For promotion initiatives outside Europe through procured services, the systematic ex-ante controls implemented ensure the legality and the regularity of the expenditure; the risk of errors is estimated as not material and sample-based ex-post controls are not considered necessary.

²⁸ Costs incurred through subcontracting are subject to targeted ex-ante controls on respect of competitive tendering procedures and quality delivery for the agreed price. They are not subject to inherent risks in declaring actual costs for activities performed by beneficiaries in-house.

²⁹ The sample will not be representative, thus requiring a qualitative analysis of results and error rates in drawing overall assurance for the programme.

Based on the audit results reported by CHAFEA for 2020 and the preliminary results of three ex-post audits performed in 2021, REA estimates that the detected error rate is **1.88%** and the residual error rate **1.53%**.

Administrative and logistical support services

Of the REA support services, only expert management includes spending; the validation services are part of the Commission's corporate control system for budget implementation.

The contracting and payment of experts uses a fully decentralised circuit with no counterweight. This is the most appropriate circuit due to the very high volume of transactions, the relatively low complexity in financial management, the low value of the payments, and the short time limit to pay. The yearly ex-post verification campaign performed by the finance unit did not identify financial errors in the selected sample covering the period of 1 July 2020 to 30 June 2021. Therefore REA management opted for retaining a “conservative” estimated error rate of **0.5%** for the purpose of the calculation of risk at closure.

Conclusion on the legality and regularity of the financial transactions

REA's portfolio consists of

- segments implemented under the research framework programmes FP7 (except MCA) and RFCS, for which, overall, the residual error rate have persistently been above 2%: they account for 2.19% of the relevant expenditure in 2021;
- other segments, namely the MCA programme of FP7, Horizon 2020, AGRIP, the administrative expenditure and the expert related spending have low residual/estimated error rates and account for 97.81% of the relevant expenditure in 2021.

These results reflect the performance of the related control systems, taking into account the complexities of the programmes, the risk profile of the beneficiaries, the inherent risks of the spending modalities, as well as the overall control strategy followed.

For the main segments recurrently affected by error rates over 2%, the causes, the remedial actions and the future expectations are explained above. Despite the absence of a reservation, given their limited share in overall expenditure and total amount at risk at closure, targeted actions are taken to address any identified weaknesses.

REA has in place an effective mechanism for correcting errors, including recoveries and financial corrections. During the reporting year the executed corrective capacity amounted in total to EUR 13.53 million representing 0.74% of the relevant expenditure. The benefit at ex ante level control amounts to EUR 11.9 million, whilst recoveries and financial corrections following the results of ex post controls amounted to EUR 1.63 million. (for more details see Annex 3 – table 8 and Annex 7).

REA's relevant expenditure, its estimated overall risk at payment, estimated future corrections and risk at closure are set out in Table 1: Estimated risk at payment and at closure.

The estimated overall risk at payment for 2021 expenditure amounts to EUR 28.01 million, representing 1.53 % of REA's total relevant expenditure for 2021. This is the AOD's best, conservative estimate of the amount of relevant expenditure during the year not in conformity with the contractual and regulatory provisions applicable at the time the payment was made.

This expenditure will subsequently be subject to ex-post controls and a proportion of the underlying errors will be detected and corrected in subsequent years. The conservatively estimated future corrections for 2021 expenditure amount to EUR 5.90 million.

The difference between those two amounts results in the estimated overall risk at closure of EUR 22.11 million, representing 1.21 % of the REA's total relevant expenditure for 2021. This is 0.47% lower than in 2020, but this result should be read with caution, as explained under the section devoted to the H2020 control results.

For an overview at Commission level, the DGs' and Executive Agencies' estimated overall risk at payment, estimated future corrections and risk at closure are consolidated in the AMPR.

Table 2 : Estimated risk at payment and at closure (amounts in EUR million)

The full detailed version of the table is provided in Annex 9.

EA REA	Relevant expenditure	Estimated risk (error rate %) <i>at payment</i>		Estimated future corrections and deductions		Estimated risk (error rate %) <i>at closure</i>	
		(1)	(2)	(3)	(4)	(5)	(6)
	<i>m EUR</i>	<i>m EUR</i>	%	<i>m EUR</i>	%	<i>m EUR</i>	%
Operational budget:							
Horizon Europe	1.20	0.01	0.50%	0.00	0.00%	0.01	0.50%
RFCS	36.66	1.56	4.26%	0.41	1.13%	1.15	3.13%
AGRIP	49.62	0.93	1.88%	0.17	0.35%	0.76	1.53%
H2020 MSCA	709.21	3.97	0.56%	0.43	0.06%	3.55	0.50%
H2020 - (excl. MSCA)	897.67	20.56	2.29%	4.85	0.54%	15.71	1.75%
FP7 - People	11.97	0.21	1.73%	0.02	0.19%	0.18	1.54%
FP7- Security theme	0.63	0.03	5.44%	0.01	1.53%	0.02	3.91%
FP7- SME actions	2.62	0.16	6.12%	0.01	0.37%	0.15	5.75%
Expert management	28.19	0.14	0.50%	0.00	0.00%	0.14	0.50%
Sub-total	m EUR 1737.77	m EUR 27.57	% 1.59%	m EUR 5.90	% 0.34	m EUR 21.67	% 1.25
<i>Operating budget</i>	87.88	0.44	0.50%	0.00	0.00%	0.44	0.50%
Total EA (operational + operating)	m EUR	m EUR	%	m EUR	%	m EUR	%
	1 825.66	28.01	1.53%	5.90	0.32%	22.11	1.21%

b) Fraud prevention, detection and correction

REA has developed and implemented its own anti-fraud strategy since 2013, on the basis of the methodology provided by OLAF. It is updated regularly and according to the specific needs. It was last updated in October 2019. Its implementation is being monitored and reported to the management in quarterly and semi-annual reports. All necessary actions have been implemented.³⁰

The Common Anti-Fraud Strategy of the R&I family (RAFS), agreed by the CIC Executive Committee, addresses fraud risks shared by the various bodies implementing research framework programmes. Common communication activities, training for operational staff, intelligence analysis and risk-based audit preparation and selection ensure a consistent and efficient approach. REA takes an active part in the development and the implementation of this strategy, through the Fraud and Irregularity in Research Committee (FAIR).

The main purpose of REA's anti-fraud approach is to translate the strategic priorities into operational measures which address risks that are particularly relevant for the operations managed by REA. It underlines the importance of the measures already in place to mitigate fraud in the framework of the REA-managed programmes.

Awareness raising remains the main preventive measure. In this regard, REA delivered in 2021 an updated version of the common antifraud training material for the R&I family and held four trainings in cooperation with OLAF³¹. All sessions were open to all services managing the R&I framework programmes. Two further trainings were devoted to the EDES and to bankruptcy issues. As a result of these efforts, and according to the 2021 ICAT survey, 85% of REA staff is familiar with the fraud prevention and detection measures.³²

Following the reorganisation of the Agency, a particular attention was given to informing the new colleagues about what is expected in REA regarding fraud prevention and detection and to including the new programmes into the anti-fraud activities.

REA also contributed to the Commission anti-fraud strategy and followed up 87% of OLAF's *financial* recommendations addressed to REA through 2009-2021. The reasons for not (yet) implementing a recommendation were either for cost-effectiveness or because of the outcome of the analysis of the impact of the OLAF findings or the additional evidence provided by entities within the relevant adversarial procedures in view of recovery. In a few instances, recommendations were addressed to, or implemented by, other services. OLAF recommendations still to be implemented include also amounts not yet decided for new

³⁰ For further details, please refer to Annex 7.

³¹ In REA, this training is mandatory to all staff dealing with research grants.

³² The survey also included including those who, due to their working responsibilities, are not concerned by potential external fraud.

reports, and the recoveries yet to be launched pending the closure of the relevant adversarial procedures.

The results of anti-fraud measures implemented can be summarised as follows:

Altogether, the implementation of 41 OLAF reports with financial recommendations addressed to REA from 2009 to December 2021 amounts to EUR 18.9 million (out of EUR 20.3 million as the Financial Amount Established to be Recovered - FAER). These figures include, among other, the recommendations specified in the six OLAF reports addressed to REA in 2021.

The IAS audit on anti-fraud action in the research area was closed in January 2021. The action plan to address the two important recommendations has already been implemented.

On the basis of the available information, REA has reasonable assurance that the anti-fraud measures in place are effective.

c) Other control objectives: safeguarding of assets and information, reliability of reporting (if applicable)

The expert management and SEDIA systems' security has further improved. Formal procedures to add, manage and remove user access rights to IT applications are in place. REA implements effective controls on legal and financial validation and verification services.

Concerning the management of classified information in projects, REA has processes and procedures for the handling of projects that handle EU restricted information. Although such projects represent a small share in the REA's portfolio, during 2021 REA made significant efforts in improving the management of the projects concerned and succeeded in eliminating the shortcomings detected in the audit on Horizon 2020 grant management phase III, carried out by the Internal Audit service in 2020.

Following their audit of the REA 2020 administrative accounts, the European Court of Auditors expressed a clean opinion on the accounts. The Agency's Accountant performed a validation of the systems and reports to the management and concluded that the systems and controls were operating as intended. Accounting quality controls have been performed and documented. Additional controls on legal commitments have been performed to ensure data quality in the systems. Overall, REA's accounting quality was maintained at a good level in 2021 and no major issues were detected.

The European Court of Auditors has conducted its audit on the reliability of the 2020 accounts for the operational budget.

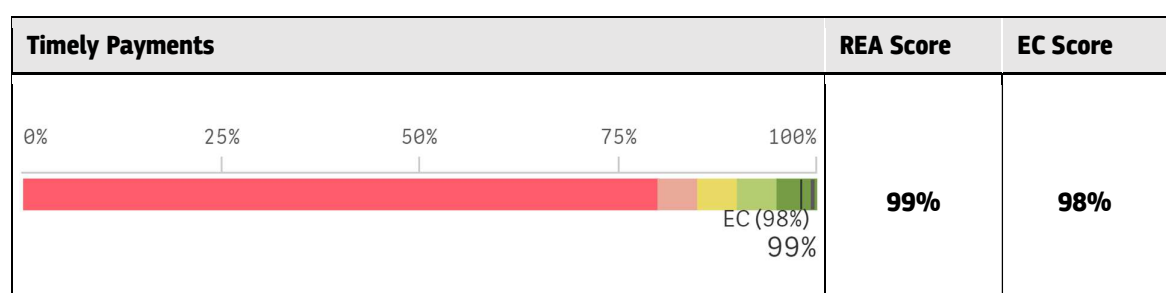
DG BUDG's Validation of local systems and assessment of accounting risk concluded that REA's accounting quality programme is compliant with the requirements set by the Commission's Accountant and that the whole accounting quality exercise is coherent. The accounting quality controls for 2021 were executed and documented. A limited number of

findings were identified and corrections were implemented. Preventive control reports were sent every month. The synthesis note for the 2021 accounting quality programme will be finalised in 2022. Overall, it was concluded that the accounting quality was maintained.

2. Efficiency of controls

The overall efficiency of the transactions that REA performed in 2021 is demonstrated through the indicators for direct grant management and the administrative and logistical support services included in Annex 6. Detailed information per activity can be found under part 1 of this report or in Annexes 2 and 4 (Financial Scorecard).

Figure 11 Timely payments indicator for operational budget

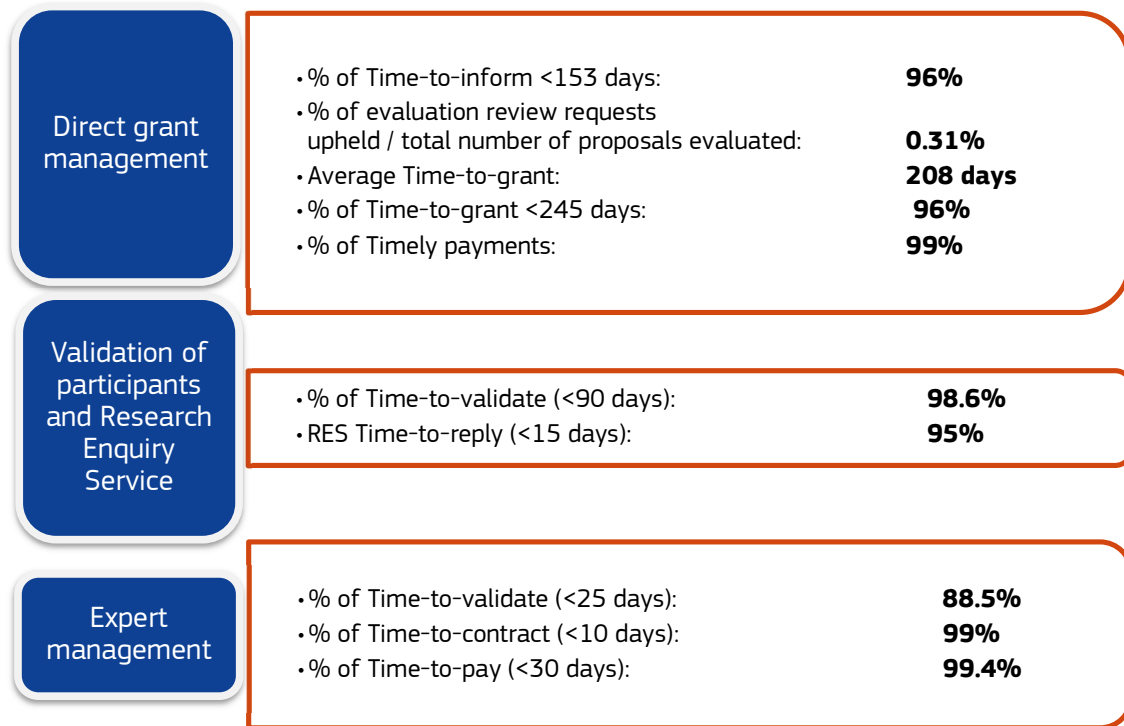


REA ensured efficient processing of payments within the legal deadlines through regular and close monitoring. In 2021, REA made 18 570 payments totalling EUR 2.17 billion. Only 0.57% of the total amount of payments processed during 2021 was delayed.

During the year, 2 191 pre-financing payments and 2 293 interim / final payments were made for grants. Additionally, REA managed 14 052 payments related to experts, of which 99.5% were paid on time, in 7,5 days on average.

1 031 payments charged to the administrative budget were performed, of which 99.98% were made on time.

Figure 12 Summary of the efficiency indicators



According to the indicators reported in Figure 12, REA maintained its excellent performance in its operations despite the challenging circumstances described at the beginning of part 1. The only indicator marking a significant decrease in performance is relating to the validation of the experts' legal entities and bank accounts, due to the pre-publication of the EIC work programme triggering a large number of validations, overwhelming the capacity of the Commission's services in charge of the final acceptance of the files in ABAC.

3. Economy of controls

This section gives an overview of the costs linked to the implementation of the various tasks entrusted to REA, with a focus on direct grant management and experts' management. The results reported here should not be considered as representative of a structural trend and do not compare to the results of 2020, for two main reasons:

- REA's mandate changed in 2021: the portfolio of activities and staff allocations to manage these activities differ compared to 2020.
- The late launch of the Horizon Europe programme delayed the evaluation of many calls, thus carrying a significant number of grants for signature and prefinancing payment to 2022. As a result, many control activities undertaken will materialise through effective budget spending in 2022 only.

Detailed figures are included in Annex 7.

Economy of direct grant management

As regards direct grant management, REA's total cost of controls, measured by the ratio of costs/payments, is of 2.74% (2.61% in 2020, under the previous mandate).

REA is also incurring costs, charged to the Commission's operational budget, to pay external expert evaluators for all parts of the R&I Framework Programme. This accounts for a cost of control of 0.63%.

An important part of the controls implemented for Horizon 2020 is delivered by the Common Implementation Centre of DG RTD. The cost of controls operated by the CIC account for 0.68%.

As a result, the estimated overall ratio of costs/payments for the direct grant management is 4.05%.

Economy of administrative and logistical support services

The cost of the participant validation services incurred in 2021 amount to EUR 9.83 million. They do not compare to any budget by REA but contribute of the Commission's overall control system.

The support given to the proposal evaluation support and the expert management of the R&I family generated a total cost of EUR 36.91 million in 2021 (against EUR 73.86 million in 2020), of which EUR 5.29 million for staff costs, EUR 28.19 million paid to evaluation experts, and EUR 7.10 million of logistical costs for the evaluation facility. These costs represent 0.63% percentage points out of a total of cost of controls invested in the Horizon 2020 and Horizon Europe programmes' implementation of 4.05%.

4. Conclusion on the cost-effectiveness of controls

Based on the most relevant key indicators and control results, REA 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.

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. 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. On the impact of the COVID-19 pandemic upon the objective achievement see Executive Summary, section 2, and section 2.1.3 of this report).

Internal Audit Service (IAS)

Based on the work undertaken in 2020-2021, IAS concluded in its contribution to the 2021 AAR preparation, that the internal control systems in place for the audited processes are effective, except for the observations giving rise to two 'very important' recommendations, both relating to the implementation of REA's participant validation services as part of the Single Electronic Data Interchange Area (SEDIA) – see below.

Follow-up on recommendations from audits concluded in previous years

In 2021, REA finalised the implementation of all recommendations stemming from previous IAS audits, i.e. on Expert management in the research area; Anti-fraud actions in the research area; H2020 grant management phase III (project closure and handling of projects generating classified information), with the exception of one action, resulting from the audit on the implementation of anti-fraud actions in the research area for which prior action from the Common Implementation Centre is needed.

New recommendations resulting from audits concluded of 2021

IAS completed two audits where REA was under particular focus: the audit on the implementation of the SEDIA through REA's Participant Validation Service and the Multi-DG audit on the implementation of audit results in Horizon 2020.

These audits acknowledged the continuous efforts made by REA to ensure the effective operation and provision of services. In particular, IAS highlighted the positive results from a survey among the clients of the Participant Validation Service (satisfaction rate 92%), the effective legal and financial controls and the good practices in for the implementation of audit results.

IAS had seven findings, of which none were considered critical, two rated as very important (both related to SEDIA) and five as important.

The two very important recommendations invite REA to:

- review the information provided to the participants in order to clarify that identity documents can only be uploaded in the protected folder 'identity documents' and assessing, with DIGIT, the feasibility of implementing automated controls on the documents uploaded by the participants. A cleansing of possible wrong uploading in previously validated participants will also be explored.

- Agree, with DIGIT³³, the priority developments still to be undertaken for the current version of PDM, pending the development, testing and roll-out of a new IT support system.

REA accepted all the IAS recommendations and will address them by dedicated action plans agreed with the internal auditors. The prospective implementation time is end-2022.

Ongoing audits still to be concluded

IAS launched two other audits where REA was involved: the Multi-DG audit on data protection and the Audit on the performance framework for research is currently at the preliminary phase. Findings from those audits are expected for 2022.

Overall, the internal audits carried out in 2021 highlighted many strengths in REA's internal control system and recommended actions for further improvements in very specific areas. None of these recommendations point to weaknesses that could qualify the overall assurance for REA management on the effectiveness of the Agency's control system. With regard to the implementation of the corrective actions, IAS did not report any overdue action relating to critical or very important recommendations.

European Court of Auditors (ECA)

Following its audit of the REA 2020 administrative accounts, ECA stated that the accounts are based on the internationally accepted accounting standards for the public sector, are legal and regular in all material respects and provide a true and fair view on the financial position of the Agency. The audit issued no recommendations. The only recommendation currently open was formulated in 2017 concerning the use of all modules of the e-procurement tool. This recommendation could not be applied since REA conducts only very-low-value procurement procedures.

In 2021, ECA has audited the reliability of the 2020 accounts for the operational budget. An immaterial issue (reclassification of a short-term pre-financing to a long-term pre-financing) was raised and no adjustment was deemed necessary. To ensure the use of the correct cut-off methodology in future, REA has developed a detailed accounting closure manual that explains the detailed procedures, calculations and controls to be applied during the cut-off exercise. The manual addresses, among other, the issue raised by ECA.

In its report on the implementation of the budget for the financial year 2020, ECA concluded that the most likely error rate for Chapter 4 'Competitiveness for growth and jobs' was 3.9%, compared to 4% the previous year. The report acknowledges the measures taken to reduce the error rate and improve the methodology of the calculation leading to the estimated error rates (detailed under section 2.1.1). However, ECA still considers that the error rate estimated by the CAS is potentially understated. The recommendations to the Commission are

³³ DIGIT is IT supplier for the PDM tool supporting the participant registration and validation process operated by REA

addressed through corrective actions involving all the bodies implementing the research framework programmes, REA included. Error rate calculations for this report have been made fully aligned with the recommendations from ECA.

In the framework of the Declaration of Assurance (DAS) 2021, ECA launched 25 audits on payments made by REA, 9 of them were concluded by early 2022, with 2 findings with a low amount of negative adjustments accepted by REA. The errors were mainly about indirect costs being declared as direct costs and an underpayment of a researcher in a MSCA grant.

2.1.3. Assessment of the effectiveness of internal control systems

The Commission and the Executive Agencies have adopted an Internal Control Framework 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.

REA 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 has due regard to the risks associated with the environment in which it operates.

Continuous monitoring of the internal control system

The continuous monitoring of the effectiveness of REA's internal control system in 2021 was supported by:

- Regular managerial coordination at the Agency, department and unit level;
- Internal reporting mechanisms, such as the bi-annual reports by the Authorising Officers by Sub-Delegation (AOSDs) to the Director; bi-annual reports by REA networks on their contributions to the improvement of the control system. In addition, the AOSDs submit brief monthly reports to the Director highlighting key developments and matters requiring management attention;
- Audit findings and the continuous follow-up of the implementation of action plans stemming from the audit recommendations;
- Monitoring of the ex-ante exceptions and non-compliance cases;
- Quarterly reports on the progress of the action plans stemming from internal audit recommendations and other action plans relating to risk management, surveys for Internal Control effectiveness Assessment (ICAT), process improvements for improved efficiency of operations, etc.
- The results of the annual review of the Agency's Internal Control Monitoring Criteria (ICMC);
- The outcome of ex-post audits on grant beneficiaries.

The outcome of the monitoring of internal control system was documented more extensively in the report of the Head of Department in charge of Risk Management and Internal Control (RMIC) to the Director. The assessment identified strengths and needs for improvements in the following areas:

Strengths

- Client satisfaction, staff expertise, effective controls for legal and financial participant validation and verification services and good collaboration with central services in implementing REA's role for SEDIA – according to IAS;
- Good coordination and harmonisation of the financial issues, good support provided to AOSDs and regular management monitoring, all linked to the implementation of audit results – according to IAS;
- Strong internal communication activities accompanying the organisational changes faced in 2021 with REA's uptake of its third mandate – demonstrated by the outcome of the ICAT survey;
- Effective change management implemented in the transition to the new mandate, including the integration of newcomers and new activities into the REA organisational culture and internal control system – demonstrated by the outcome of the ICAT survey and illustrated by the annual report of the REA Networks.

Further improvements to achieve

- Better controls on the protection of personal data and improved priority setting for further IT developments of the PDM tool – all related to the IAS audit on the implementation of SEDIA (see section 2.1.2);
- Further stepping-up attendance of ethics, anti-fraud and data protection training courses – according to the state of play of the related ICMC and performance indicators;

Moreover, REA anticipates valuable input from the staff satisfaction survey of late 2021 for all Commission services and its Executive Agencies, and for which results are under analysis (expected for Easter 2022). This may point to areas where the overall control environment of REA may be further improved.

REA's assessment of risks, including from COVID-19

In 2021, REA conducted two reviews of its risk register. Most of the risks previously identified had been sufficiently prevented or mitigated; others had not materialised.

The consequences of the on-going pandemic affected the grant management operated by REA. Projects got delayed and asked for suspensions and/or extensions as a result of confinement measures (see Part 1 of this Report, Section "Main challenges faced during the reporting period"). This remains under close monitoring and projects are urged to take maximum measures to absorb or minimise further delays. Nevertheless, REA expects that workload will further increase as a result of a longer project life cycle to be managed.

Legal affairs and European Ombudsman cases

Like in the previous years, the legal files and complaints procedures handled in 2021 identified no major shortcomings. In the sole Ombudsman enquiry closed in 2021 no maladministration from REA was found.

Conclusion

REA has assessed its internal control system during the reporting year and has concluded that it is effective, and the components and principles are present and functioning well overall, but some improvements are needed for the management of personal data and the delivery of IT components in the context of Participant Validation Services.

This needs to be considered together with the identified strengths, as explained above, and the excellent performance records, despite the particularly challenging circumstances of 2021. They demonstrate the robustness and the resilience of the Agency's internal control system.

2.1.4. Conclusions on the assurance

This report covers the management of operations for the whole of 2021, including for the activities transferred to REA as from 01/04/2021. REA has not identified particular weaknesses in the hand-over reports received for those newly delegated programmes; its subsequent management of these activities did not bring to light issues that would be detrimental to the internal control effectiveness for the management of those programmes.

The information reported in Part 2 stems from the results of the monitoring by the management and auditors, based on a systematic analysis of the available evidence. They fully support the Declaration of Assurance with respect to the use of resources for the intended purpose and in line with the principles of sound financial management, legality and regularity. This approach gives a true and fair view, and offers sufficient guarantees regarding the completeness and reliability of the information on the controls, covering the totality of the budget executed by REA.

While a part of REA's expenditure (the non-People segment of the FP7 legacy and RFCS) is affected by material error, the combined effects of the low share that it represents in the budget implemented in 2021 (0.05% and 1.44% of total payments respectively) and the low financial exposure (EUR 175 552 and EUR 1 147 314 respectively)³⁴ fall within the "*de minimis*" threshold. Therefore, no reservation needs to be introduced in the Declaration of Assurance.

³⁴ For details, please refer to the table "Estimated overall risk at closure" at the end of section 2.1.1/A

As regards the significant qualitative weaknesses identified by IAS with respect to the implementation of SEDIA, they cover a limited part of REA's activities and do not have a financial impact. They point towards areas for further improving the internal control system without questioning its overall adequate functioning. The potentially associated reputational risks did not materialise in 2021. Therefore, no reservation needs to be made in the Declaration of Assurance.

In conclusion, based on the elements reported above, 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 Director, in his capacity as Authorising Officer by Delegation for the operational budget and Authorising Officer for the operating budget, has signed the Declaration of Assurance.

2.1.5. Declaration of Assurance

Declaration of Assurance

I, the undersigned,

Director of the European Research Executive Agency

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 ⁽³⁵⁾.

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 European 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 Executive Agency or those of the Commission.

Brussels, date 31 March 2022

(signature)

Marc Tachelet

⁽³⁵⁾ 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. Modern and efficient administration – other aspects

The cost-benefit analysis that was conducted to support the delegation of the management of activities to executive agencies³⁶ calculates the number of staff allocated to agencies for 2021-2027 based on targets for efficiency gains through economies of scale of at least 15%. For REA, this will reach 27% by 2027.

REA launched a series of initiatives, in order to deliver on these expected efficiency gains. The Agency's efforts spanned over three layers. Firstly, REA seeks internal efficiencies in its day-to-day operations. An action plan is under implementation to streamline processes and simplify workflows and to efficiently (re)allocate tasks across staff profiles. Secondly, efficiency is sought via stronger cooperation with other Executive Agencies in the area of administration (e.g. joint selections and common reserve lists for recruitment, cooperation in IT related tasks). Thirdly, and most importantly, at the level of the R&I family, REA works closely with the CIC, CPC and other EAs with the aim to improve efficiency in programme implementation: improve IT tools, simplify business processes, and design the Work Programme and call planning in a less resources-intensive manner.

Further on, this section gives an overview of human resources, digital transformation and environmental management. In 2021, REA successfully addressed the consequences of the COVID-19 pandemic and ensured a smooth transition between the two mandates. As in previous years, REA put emphasis on the close cooperation with the Commission's services and the other executive agencies.

The various outputs and the state of play of the indicators concerning administrative activities are reported in Annex 10.

2.2.1. Human resource management

In 2021, HR activities focused on preparing and accompanying the reorganisation of the Agency, while operating in a mostly remote environment. The following elements contributed to the successful transition:

- Efficiently managing the integration of new colleagues in REA as well as the departure of REA staff to other executive agencies (EISMEA and HaDEA), the growth of REA's management team, internal mobility, and new recruitments.
- Having, by the end of 2021, 866 active staff out of the 885 staff planned in the Establishment Plan for 2021. This corresponds to an occupation of 97.9%. Throughout 2021, staff turnover was at a rate of 6.5%.

³⁶ Staff Working Document SWD(2021)20 accompanying the Communication to the Commission C(2021) 946 of 12.2.2021

- Learning and development activities focusing on welcoming and providing induction training to colleagues that joined REA.

REA continued to develop actions to maintain staff commitment and further improve HR related processes. Specific examples are:

- Designing a new internal selection procedure to allow REA contract staff in Function Group III to potentially advance to Function Group IV. This selection will run early in 2022.
- Training of REA's managers on skills related to the hybrid working context.

REA further strengthened the Social Dialogue with trade unions and staff committees and worked for the alignment of HR practices between the Executive Agencies.

Progress was made towards achieving a gender balance in the middle management team, with share of female managers increasing to 47% by the end of 2021.

REA's first results of the 2021 Commission Staff Survey, in which 51% of the Agency's staff took part, showed an improvement in the staff engagement index: 77%, up by 8 percentage points compared to 2018.

2.2.2. Digital transformation and information management

Information management in REA was affected by the reorganisation. REA invested further in IT security with respect to its information systems and has been implementing the digital transformation principles ("digital by default and once-only", "security and privacy", "openness and transparency", "interoperability and cross-border", "user-centric, data-driven, agile") for its own IT applications. By end-2021, the overall implementation degree reached over 63%, in view of full compliance by 2024. The protection of personal data received further attention. REA's Data Protection Officer function is now exercised by the Data Protection Officer (DPO) and the Deputy Data Protection Officer (DDPO).

The monitoring of data breaches and data subject requests was further improved and actions to raise awareness among colleagues about data protection matters were taken, especially towards newcomers.

On 13 October 2021 the REA Steering Committee adopted the decision establishing the [implementing rules](#) concerning the duties and powers of the DPO, as foreseen by Article 45(3) of Regulation (EU) 2018/1725.

With regard to document management, REA successfully managed the integration of the new organisational chart in ARES and reassigned all files accordingly. In addition, file transfers (paper and electronic) to HADEA, EISMEA and from EASME, CHAFAEA, DG RTD, DG CNECT were duly completed.

2.2.3. Sound environmental management

REA, together with ERCEA, EISMEA and EACEA, completed the external Eco-Management and Audit Scheme (EMAS) verification exercise. The auditor is expected to deliver the final report in the first half of 2022.

The *gREAn team* organised several awareness-raising events, in line with the corporate EMAS campaigns. REA also participated at the end of year/new year action for energy savings in the buildings (BEST) coordinated by OIB. It encouraged staff to take part in the VeloMai/Velo walk. New guidelines for sustainable events were included in the REA guidelines for hybrid events.

REA was awarded a prize in the EC's corporate competition on sustainable conferences and events for the category "External small events with less than 1 000 participants". The EMAS Steering Committee acknowledged REA as one of the nine most performant EC services in terms of EMAS coordination matters.

Further details of the actions undertaken are included in Annex 10.