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HaDEA IN BRIEF

Set up in 2021, the European Health and Digital Executive Agency (HaDEA) implements European programmes and initiatives on behalf of the European Commission, by managing projects that are related to health, digital, food, industry and space.

HaDEA is supervised by a Steering Committee composed of representatives of its six parent Directorates-General (DGs): DG Health and Food Safety (DG SANTE), DG Research and Innovation (DG RTD), DG Communication Networks, Content and Technology (DG CONNECT), DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), DG Defence Industry and Space (DG DEFIS) and the Commission’s European Health Emergency Preparedness and Response Authority (HERA). This close cooperation with the parent DGs is essential not only for programme implementation, but also for the feedback the Agency provides to the Commission in view of the latter’s policy tasks.

The Commission has entrusted HaDEA with the implementation of the following programmes:

- the EU4Health Programme;
- the health research strand of Horizon Europe (Cluster 1);
- the health-related components of the Single Market Programme (food chain);
- Horizon Europe’s cluster 4 “Digital, Industry and Space”;
- the digital strand of the Connecting Europe Facility Programme;
- the Digital Europe Programme.

Located in Brussels, the Agency has its own legal identity and is entrusted with its own operating budget (EUR 42 million in 2022) financed by the EU General Budget. The Director has overall responsibility for implementing HaDEA’s budget, in accordance with the principles of sound financial management.

At the end of 2022, HaDEA had an international team of 418 staff members.

On 18 January 2022, the Commission appointed Ms Marina Zanchi as Director of the Agency. She took up functions on 16 February 2022.
EXECUTIVE SUMMARY

This annual activity report is a management report of the Director of the European Health and Digital 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 departments’ specific objectives

The second year of HaDEA’s mandate was very dynamic. While completing its set-up, the Agency recorded significant achievements across the programmes, contributing to the implementation of the policies and specific objectives of its parent DGs.

Contribution to the Commission’s priorities

The Agency contributed to key priorities of the von der Leyen Commission, notably the building of a European Health Union and the implementation of Europe’s Beating Cancer Plan, and to the digital and industrial transformation of the EU.

The Agency showed its ability to react quickly to newly emerging Commission’s priorities. For instance, when, in the wake of the Russian war of aggression against Ukraine, the Commission amended the EU4Health work programme 2022 and introduced a dedicated open call for action grants to promote the mental health of Ukrainian displaced people, HaDEA published the unplanned call just one week after the adoption of the work programme amendment.

Another example is the supply contract for the purchase of more than 330 000 monkeypox vaccine doses for donation to EU Member States, which the Agency signed in June 2022 following a procedure that was completed in less than three weeks.

HaDEA’s 2022 achievements

HaDEA signed 896 grant agreements and 43 procurement contracts, catching up on the delay caused by the late adoption of some 2021 work programmes.

On eight of the ten indicators from the Financial Scorecard, HaDEA’s score is the same as or higher than the average of the Commission’s services (2). HaDEA thus managed to fully execute its operational budget, both in commitments and payments. Thanks to the commitments of the staff, 100% of the payments were made on time, exceeding our target by 2%.

(1) Article 17(1) of the Treaty on European Union.
(2) See Annex 4.
Policy feedback

HaDEA continued to build a close relationship with the Commission, and in the first instance with its parent DGs. Following the adoption of the HaDEA Policy Feedback Framework at the end of 2021, annual feedback-to-policy plans were developed for each of the programmes and/or strands within a programme. At the end of the year, their implementation rate exceeded the 70% target.

The input provided by the Agency includes among other lessons learnt on the implementation of the first calls under the 2021-2027 programmes that will help design the upcoming work programmes. HaDEA also presented thematic clustering bringing together projects under one umbrella to maximise the synergies and impact, as well as reports on programme implementation.

Reinforcing the Agency

2022 was a milestone year for HaDEA in terms of recruitment. HaDEA started the year with 331 staff in place. By 31 December
2022, HaDEA had 418 staff in place, exceeding the 95% occupation rate foreseen in its work programme 2022.

The Agency played a key role in coordinating the development of a common multiannual interagency HR Strategy based on the Commission’s HR Strategy. HaDEA also launched initiatives supporting a strong organisational culture to keep staff’s motivation high, such as a managerial excellence plan and the launch of the “HaDEA communities”.

**Challenges**

The uncertainty about the participation of UK organisations made the grant agreement preparation phase more complex for several programmes. Due to the non-association of the UK to the EU programmes, consortia involving UK partners had to be modified, including changes of coordinators or the inclusion of additional beneficiaries from other countries to comply with the grant eligibility criteria. This significantly prolonged the conclusion of some grant agreements.

HaDEA’s portfolio entails sensitive topics linked to health and space research, the development of major data and digital infrastructures as well as cybersecurity. The ownership and control assessments and ethics assessments required for the selected projects also slowed down the contracting process for some programmes.

Notwithstanding these challenges, HaDEA continued to deliver high-quality programme management services to its stakeholders.
B. Key performance indicators

**Time to grant**

![Graph showing 92% and 8%]

Target: 98% of grants signed within deadlines

HaDEA’s methodology for calculating grants signed on time takes into account calls with a time-to-grant deadline in the reporting year and excludes Identified Beneficiary Actions and reserve list projects. Time-to-grant per programme is available in Annex 2 and 3.

*Source of data: HaDEA [001]*

**Client satisfaction**

![Graph showing 88% and 12%]

Target: Higher levels of satisfaction by client group/programme

*Source of data: external client surveys/events evaluation forms [001]*

**Time to pay**

![Graph showing 100%]

Target: 98% of timely payments

Time-to-pay per programme available in Annex 2.

*Source of data: HaDEA [Unit C1]*

**Implementation of the operational budget**

100% committed vs. budget

100% paid vs. budget

Target: 100% of implementation (both for commitments and payments)

*Source of data: HaDEA [Unit C1]*

**Agency’s overall risk at closure**

![Bar chart showing 1.74% in 2022]

Target: <2%

*Source of data: HaDEA [C2.2]*
C. Key conclusions on financial management and internal control

In line with the Commission’s Internal Control Framework HaDEA 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. Please refer to annual activity report section 2.1.3 for further details.

In addition, HaDEA 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.

As regards the legality and regularity of the transactions, HaDEA considers that the cumulative residual error rates are below the established targets for all current programmes, except for the Connecting Europe Facility (CEF) Telecom – Digital Service Infrastructure (DSI) segment. For this segment, the residual error rate continued to decrease but remained above the 2% materiality threshold at 3.28%. However, the reservation issued last year can now be lifted, as the cumulative conditions of the de minimis rule are met by the end of 2022: the share of the programme in budget implementation is below 5%, at 0.62% of the total payments of the Agency and the financial exposure is below EUR 5 million (EUR 1.57 million). Please refer to section 2.1.1 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. Improvements are necessary concerning the further development of HaDEA’s control strategy, the improvement of the procedures and the reinforcement of the follow-up of the deviations.

Several measures have already been implemented whereas others will be part of dedicated action plans targeting the areas with the identified deficiencies.

The Director, in her capacity as Authorising Officer by Delegation, has signed the Declaration of Assurance.

D. Provision of information to the Commissioners

In the context of the regular meetings during the year between the Director and the parent DGs 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 DGs Directors General.
1. IMPLEMENTATION OF THE AGENCY’S ANNUAL WORK PROGRAMME – HIGHLIGHTS OF THE YEAR

This section provides an overview of the activities carried out by the Agency for the implementation of the programmes delegated to the Agency: EU4Health, Horizon Europe (Cluster 1 and Cluster 4), SMP Food, Digital Europe Programme, and Connecting Europe Facility 2 - Digital.

One of the novelties of 2022 was the preparation and implementation of annual policy feedback plans for each delegated programme/programme strand, in line with HaDEA’s Policy Feedback Framework adopted by the Steering Committee at the end of 2021.

1.1. EU4Health

The EU4Health Programme paves the way for the European Health Union by investing in health priorities and covering five overarching ‘strands’: (1) crisis preparedness; (2) health promotion and disease prevention; (3) health systems and healthcare workforce; and (4) digital - with (5) cancer as a transversal strand. EU4Health is implemented through annual work programmes (AWPs) and funds grants and procurements managed by HaDEA.

Following the Russian war of aggression against Ukraine, the Commission signed an association agreement with Ukraine on 15 July 2022, allowing Ukrainian entities to participate in the EU4Health Programme. In this respect, HaDEA has been working with the EU4Health National Focal Points (NFPs) to support Ukrainian beneficiaries and prepare the nomination in January 2023 of a dedicated NFP for Ukraine.

On 14 January 2022, the Commission adopted the EU4Health 2022 AWP with a total budget of EUR 835 349 555. Furthermore, the Commission adopted two decisions in 2022 (\(^{(3)}\)), each amending both the EU4Health AWP 2022 and 2021.

Grants management

In the wake of the Russian war of aggression against Ukraine, the Commission amended the AWP 2022 and introduced a dedicated open call for action grants promoting the mental health of Ukrainian displaced people. HaDEA published this unforeseen call just one week after the adoption of the work programme amendment. The Agency is now supporting synergies between the four selected projects to maximise the positive impact on mental health and psychosocial wellbeing of Ukrainian displaced people.

The amendment of the AWP 2021 introduced two grant actions to (i) support a European Health Emergency preparedness and Response Authority (HERA) laboratory network and (ii) strengthen Member States’ IT systems ensuring interoperability with HERA’s IT platform for intelligence gathering. Despite the very tight timeline, HaDEA successfully launched these actions and signed the grant agreements before the legal deadline of end 2022.

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\(^{(3)}\) Respectively on 12 April and 25 July.
Overall, in 2022 HaDEA launched **42 calls for proposals and invitations to submit proposals**, for a total budget of EUR 557 million (⁴). These include 14 open calls for proposals and 17 invitations to Member States to submit proposals for joint actions and other direct grants. The grant actions cover several key policy priorities of the Commission, such as the fight against cancer and non-communicable diseases, vaccination and antimicrobial resistance (AMR).

In 2022, HaDEA successfully signed 143 grant agreements under the EU4Health programme (both the 2021 and 2022 EU4Health AWPs), for a total EU funding of almost EUR 225 million.

**Procurement management**

In 2022, HaDEA launched 42 procurement procedures, stemming from both the 2021 and 2022 AWP, for a total indicative budget of EUR 300 million. The Agency expects to launch the remaining procedures from the 2022 WP by mid-2023.

**HaDEA signed 35 contracts in 2022**, covering all of the Programme’s priorities. At the end of 2022, 49 actions were ongoing, including the Third Health programme legacy.

Ongoing actions cover several key topics, including vaccination, preparedness and AMR, tobacco control and cancer prevention, as well as support to legislative initiatives such as the regulations on medical devices, health technology assessment, serious cross-border health threats and the European health data space. The offers submitted under the call on ever-warm production facilities for vaccine production are under evaluation.

HaDEA also completed the setup of the procurement sector and finalised its procedure on procurement. Only one out of 19 files submitted to HaDEA’s advisory committee for procurement and contracts did not receive a favourable opinion, demonstrating the Agency’s capacity to conduct quality assessments.

In terms of actions’ outputs, HaDEA supported DG HERA in bringing to market and/or stockpiling medical countermeasures (⁵). The Agency also signed the supply contract for the purchase of more than 330 000 monkey-pox vaccine doses for donation to EU Member States. This demonstrated the Agency’s capacity to support policy initiatives of parent DGs in an emergency context. Finally, one of the legacy contracts enabled more than 600 exchanges of healthcare professionals across the 23 European Reference Networks.

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(⁴) Stemming from the 2021, 2022 and 2023 EU4Health AWPs.

(⁵) Medical countermeasures are medicines and medical supplies that can be used to diagnose, prevent, or treat diseases related to chemical, biological, radiological, or nuclear threats.
Outreach and external communication

In 2022, HaDEA actively promoted the EU4Health programme and supported beneficiaries to disseminate the outcomes of their activities.

HaDEA provided support and information to potential applicants to calls for proposals during seven info sessions and five hands-on workshops. HaDEA also participated in national info days on EU4Health funding opportunities organised by national authorities in Italy, Norway, Germany and Malta. Moreover, HaDEA supported the EU4Health NFPs by organising a dedicated meeting in Brussels in September 2022, as well as by presenting the EU4Health Programme during various events organised by the NFPs. HaDEA also promoted calls for tenders to economic operators.

HaDEA was very active in reaching out to potential applicants, tenderers, stakeholders, and the public at large during key health conferences, such as the European Health Forum in Gastein, and the European Health Conference in Berlin, where HaDEA held a dedicated stand.

HaDEA also gave visibility to the different actions managed by the Agency through web articles and social media posts.

Feedback to policy

In line with the HaDEA policy feedback framework, the Agency prepared in cooperation with DG SANTE and HERA the 2022 and very first feedback-to-policy plan for the EU4Health Programme and the Third EU Health Programme.

To support DG SANTE in designing the EU4Health AWP 2022 dedicated call for actions promoting the mental health of Ukrainian displaced people, HaDEA provided input on the Third Health Programme’s grant actions on the mental health of migrants and refugees.

Furthermore, HaDEA actively shared with DG SANTE, HERA and the Member States progress and lessons learned from grant and procurement actions.

1.2. Horizon Europe

1.2.1. Cluster 1: Health

HaDEA contributes to many of the Commission’s objectives in health research: finding new ways to keep people healthy, preventing diseases, developing better diagnostics and more effective therapies, using personalised medicines approaches to improve healthcare and wellbeing, and taking up innovative health technologies, such as digital ones.
Call management

The Agency had evaluated a series of ten calls issued under the 2021 financing decision in the last quarter of 2021. HaDEA informed the applicants of the outcomes of the evaluation in January 2022 and signed the grant agreements for 104 successful projects in 2022.

In parallel, HaDEA carried out the evaluation of eight calls for proposals from the 2022 financing decision, covering 24 topics. The budget available allowed the Agency to fund 61 successful projects from the single-stage calls. The Agency also conducted the evaluation of the second step of the two-stage calls from the 2022 funding decision in autumn. In total, 54 projects will be funded.

EU Mission on Cancer

Furthermore, the Agency contributed to delivering the **EU Mission on Cancer**, with the implementation of the two 2021 calls for proposals. HaDEA was able to fund 13 projects.

Finally, following the evaluation of proposals submitted under the 2022 Cancer Mission calls (five topics with a total budget of approximately 126 million), another 20 projects have been awarded funding.

In total, 176 new health research projects were therefore funded in 2022. HaDEA is also finalising the grant agreement preparation for 74 projects, which will add to HaDEA’s portfolio in 2023.

The ethics evaluation constituted an important part of the Agency’s work in 2022: almost all projects selected for funding included ethics issues. In total, HaDEA assessed 195 proposals.

The uncertainty about the participation of UK organisations rendered the call management phase more complex. UK organisations were eligible during the proposal submission stage, but due to not being associated to Horizon Europe, had to be declared ineligible for funding at the grant signature stage. All the consortia involving UK partners therefore had to submit modifications to their grant agreements, including changes of coordinators or the inclusion of additional beneficiaries from other countries to comply with the grant eligibility criteria. This significantly prolonged the grant agreement preparation and also led to budget left-over of EUR 26.6 million compared to the proposal stage. This budget has been used to fund proposals from the reserve lists of the calls.

Hop-on facility call

In addition to the activities planned in its work programme, HaDEA implemented the Hop-on facility call for health projects. Ongoing Horizon Europe research and innovation actions projects without any widening partner were eligible. The nine proposals selected in 2022 will turn into amendments to integrate the new widening partners.
1.2.2. Project management

127 projects funded under Horizon Europe were running in 2022. In addition, HaDEA still monitors and supports the implementation of around 500 ongoing or recently completed projects funded under the legacy programme Horizon 2020 Societal Challenge 1 – Health, Wellbeing and Demographic Change.

As in the previous years, HaDEA had to process a very high number of amendments requesting an extension of the project duration, most of them caused by the impact of the Covid-19 pandemic. Indeed, the Covid-19 pandemic particularly affected health research as patients and researchers were kept out of the medical facilities. 32% of the amendments for health research projects included an extension. This naturally also affects the budget implementation.

Promotion and dissemination

HaDEA and its parent DGs co-organised a meeting with the Health NCPs on 13 December 2022, informing them about the funding opportunities under the 2023-2024 work programme.

Moreover, HaDEA also served as a multiplier of information to various events. Lastly, HaDEA contributed to showcasing interesting project developments and results via social media and dedicated articles.

Support to Commission’s policy work

In parallel to programme implementation, HaDEA provided regular input to its parent DGs, in particular to DG RTD, in the form of specific information on projects and project portfolios, notably on Covid-19 research. Furthermore, HaDEA started setting up thematic clusters of projects, such as “Health impacts of climate change, costs and benefits of actions and inaction”. These clusters bring together projects dealing with the same topic under one umbrella to maximise the synergies and impact. Cluster-specific project deliverables have been therefore included in some grant agreements, covering participation in joint workshops, exchange of knowledge, development and adoption of best practices, or joint communication activities.

1.2.2. Cluster 4: Digital, Industry and Space

1. Digital

The actions implemented by HaDEA within the digital strand of the Horizon Europe programme, Cluster 4: Digital, Industry and Space, aim at enabling industry to accelerate and lead the twin green and digital transitions through research and innovation actions. These actions contribute to the Commission’s objective “A Europe fit for the digital age”.

hadea_aar_2022
In addition, the Agency managed the legacy activities of Part II “Industrial leadership” of the Horizon 2020 Specific Programme, and notably the specific objective “Leadership in enabling and industrial technologies (LEIT)”.

Call management

HaDEA’s main activities in this area for 2022 included the finalisation of 38 grant agreements from the 2021 calls and the evaluation of the proposals submitted under the 2022 calls for proposals. 36 out of 227 eligible proposals were invited to a grant agreement preparation, i.e. a success rate of 15.8%. 32 grant agreements stemming from this process were signed, and another four are in preparation.

In total, HaDEA therefore funded 70 successful proposals under the 2021-2022 work programme for a total budget of around EUR 376 million, covering topics ranging from artificial intelligence, to photonics, cognitive edge cloud, robotics and immersive learning.

Project portfolio management

In 2022, in addition to the 70 grants signed under Horizon Europe, HaDEA managed 193 Horizon 2020 legacy projects. 18 of them were closed, and 14 others will be finalised during the first months of 2023. The main tasks linked to these projects included the follow-up of deliverables and milestones, the setting-up of technical reviews, the recruitment of experts for reviews, the monitoring of payments both to project coordinators and experts, as well as the coordination of projects under the same topic to increase synergies.

Promotion and dissemination

In December 2022, HaDEA organised the “Horizon Europe Cluster 4 Info Days” in collaboration with relevant parent DGs to advertise and provide information on the 2023 Horizon Europe main calls for proposals. The Agency also provided support to the Commission for the 2022 Research & Innovation Days.

The Agency also showcased relevant project developments and results during other events in the digital domain, such as the EU Open Data Days, the European Big Data Value Forum and the 5G Techritory forum.

Additionally, HaDEA continued to promote the outcomes of the successful Horizon 2020 legacy projects to increase the interest in Horizon Europe. SECOIIA, one of the H2020 legacy projects managed by HaDEA was featured among the finalists for the Industry 5.0 Award.

Feedback to policy and support activities

The 2022 feedback-to-policy plan was discussed and approved by HaDEA and DG CONNECT in the first quarter of the year. The Agency delivered most of the policy outputs foreseen in the plan, and notably: (i) a report on the evaluation process, including feedback from the evaluators and the Agency, (ii) a project portfolio assessment report, (iii) the organisation of
a workshop on “Photonic Sensing and Imagine for Health”, and (iv) a success stories’ report \(^5\).

A process for handling ad-hoc requests was also designed and implemented, which enabled the Agency to address several additional requests from DG CONNECT.

2. Industry

The Industry strand of the Horizon Europe Pillar 2, Cluster 4 contributes to the European Research and Innovation agenda and aims at increasing industrial competitiveness, sustainability and resilience for the benefit and prosperity of Europe and its citizens.

Call management

HaDEA’s main activities in this area included the finalisation of 109 grant agreements of the 2021 calls and the evaluation of the proposals submitted under the 2022 calls. 99 grant agreements stemming from this process were signed in 2022, while another five are being finalised.

In total, HaDEA therefore funded 208 successful proposals under the 2021-2022 work programme. The total budget committed for the 208 signed projects amounts to EUR 1 343 million.

Project portfolio management

In 2022, HaDEA implemented and monitored a total of 423 ongoing projects under the Industry strand of the Horizon Europe Cluster 4.

The total EU funding of running projects in 2022 amounts to circa EUR 3.688 million. As part of project monitoring activities, 154 amendments were signed and 135 payments carried out, demonstrating a dynamic project implementation process throughout the year 2022.

\(^5\) To be delivered by February 2023.
Promotion and dissemination

To promote the results achieved under the Horizon 2020 programme to a wider audience, HaDEA coordinated the participation of a selection of projects to the following events:

- the New European Bauhaus Festival held in Brussels in June;
- the PDAC Convention 2022 held in Toronto in June. On that occasion, HaDEA contributed to the organisation of a workshop on “EU Research & Innovation for sustainable raw materials value chains”, together with DG GROW;
- the Village Festival of IndTech 2022, the French Presidency’s conference on industrial technologies. HaDEA was also present at this event, together with DG RTD, several National Contact Points and the NCP4Industry network;
- the annual Raw Materials Information System (RMIS) Technical Workshop, held in October (co-organised with the Joint Research Centre).

During the 2022 EU Raw Materials Week which took place in November, HaDEA co-organised with DG GROW the third Horizon Technology Success Stories event, showcasing ten successful projects. The publication “An insight into successful raw materials projects” published on that occasion gave an overview of past projects and new success stories.

The COP27 held in November was an exceptional opportunity to highlight two of HaDEA’s projects on solar energy generation and storage during a hybrid EU side event, moderated by HaDEA’s Director.

Additionally, HaDEA organised the Horizon Europe Cluster 4 Info Days on 12-14 December 2022 to present the relevant 2023 calls of the work programme 2023-2024.

Finally, to promote the results of selected HaDEA projects, three CORDIS dossiers were either updated or created in different thematic areas (’).

Feedback to policy and support activities

In 2022, colleagues in the Agency and the parent DGs worked on the preparation of the first annual feedback-to-policy plan and the procedures of its implementation.

Feedback to policy activities performed in 2022 focused on giving input on relevant policies and initiatives, for example regarding the Open Innovation Test Beds, Processes4Planet, Clean Steel and Made in Europe Partnerships, Raw Materials Policy, Industrial Technology Roadmaps, Safe and Sustainable by Design and Industrial Decarbonisation & Circular economy.

(’) Sustainable innovative solutions for mineral exploration, Safety, sustainability and security for Europe’s mineral processing industry, and Open Innovation Test Beds to accelerate European innovation.
3. Space

Call management

Following the closure of the first calls on 16 February 2022, HaDEA carried out the evaluation of 131 (⁹) proposals from the two parallel 2021 and 2022 calls (⁹) from March to June. A mandatory security scrutiny was organised by DG HOME for 28 selected proposals. The Agency actively supported this process, which resulted in several security measures to be implemented by some of the projects.

The Agency involved 173 external experts in the evaluation, their careful selection reflecting the strategic nature and sensitivity of many topics. Since an often small number of proposals answered the rather specific call topics, the call success rates were quite high: 37.5% and 32.9% for the 2021 and 2022 calls, respectively. The Agency invited 45 (¹⁰) of the evaluated proposals for grant agreement preparation (GAP).

HaDEA also launched five Identified Beneficiary Actions (IBA) on Space Surveillance and Tracking (SST) from the 2022 work programme in December, later than planned. This was mostly caused by the delay in setting up the Space Surveillance and Tracking Partnership, a DG DEFIS’ initiative encompassing 15 Member States and the identified beneficiary of these actions. The five proposals are expected to be submitted by the end of January 2023.

Project management

The GAP of the 2021 and 2022 calls turned out to be much more intensive than expected: it took place from July to October with the responses of the consortia slowing down during the summer holidays. The ownership and control assessments for several participants in topics with participation restrictions were lengthy and complex. They led to changes in the set-up of some consortia. The assessment of the financial capacity of a few coordinators resulted in similar changes. The pending association of the UK to Horizon Europe required last-minute adaptations of the involvement of UK entities in the consortia. With considerable effort, HaDEA succeeded to sign 40 grant agreements before the time-to-grant target date, while it took a few weeks longer for the remaining five proposals. In total, EUR 218 million EU of funding were allocated (¹¹)(¹²). In addition to the 45 new space grants, HaDEA signed a networking grant for the EU Space research national contact points (¹³).

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⁹ 58 from the 2021 call, 73 from the 2022 call.

⁹² HORIZON-CL4-2021-SPACE-01, HORIZON-CL4-2022-SPACE-01.

¹⁰ 21 from the 2021 call, 24 from the 2022 call.

¹¹ EUR 135.36 million for the 2021 call, EUR 82.45 million for the 2022 call.

¹² EUR 5 million – initially requested by but finally not committed to UK applicants – were still available at the end of 2022, e.g. for reserve list projects.

¹³ Signed under HORIZON-CL4-2021-HUMAN-31 on 14 June 2022, within time-to-grant.
Legacy projects

The management of the Horizon 2020 LEIT Space projects is well on track. At the end of 2022, 73 projects were still ongoing while the Agency was processing the administrative closure of another 51 projects. Supported by contracted experts, HaDEA held in 2022 90 review meetings to monitor project progress. The Agency made 59 interim (total EUR 34.38 million) and 30 final payments (total EUR 7.4 million) and processed 44 amendments.

Communication activities

HaDEA promoted the 2021 and 2022 Space calls in the social media. To support the 2023 call, HaDEA produced a set of short, animated videos.

On invitation of DG DEFIS, the Agency participated for the first time in the EU Space Week in a session about EU Space research achievements. Also on DG DEFIS’ request, HaDEA presented EU Space research at the EU Global Action for Space event.

At its Horizon Europe Cluster 4 Information Days, HaDEA dedicated a session to the space community and contributed to a special space training for National Contact Points.

Policy feedback and support and relations with our parent DG

HaDEA continued to collaborate closely with DG DEFIS and to support its space policy. A policy feedback plan offered an effective structure for this. HaDEA delivered essentially all elements established by the plan, except for very few activities for which the request was postponed. Many areas of analytical support related to annual coordination (14) cycles with other stakeholders in the aerospace and defence sector or served to shape a strategic research and innovation agenda for future work programmes.

Upon request from DG DEFIS, HaDEA also supported the evaluation of applications for the “In Orbit Demonstration/In Orbit Validation” call for interest in June-July 2022.

A highlight in the feedback to policy activity was the participation to the high-profile EU Space Week with a panel session organised and chaired by HaDEA on European non-dependence and a session featuring projects on Big Data and Artificial Intelligence.

1.3. Single Market Programme

The Agency implements the food safety strand of the Single Market Programme, which supports the safe production of food, the prevention and eradication of animal diseases and plant pests, and the improvement of animal welfare in the EU. The actions under this strand include also support to the fight against antimicrobial resistance as well as to the

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(14) European space technology mapping/roadmapping cycle (HARMO) led by the European Space Agency, Joint Task Force of Commission, European Defence Agency (EDA) and European Space Agency (ESA) on European non-dependence in critical technologies.
organisation of reliable official controls by the national competent authorities. In 2022, HaDEA also managed two preparatory actions (15).

Grant management

Following the late adoption of the 2021 work programme, HADEA opted for bi-annual grant agreements covering both 2021 and 2022 for (i) the veterinary programme, (ii) the phytosanitary programme, and (iii) European Reference Laboratories and European Reference Centres (EURLs/EURCs). HaDEA completed the evaluation process of these three calls, as well as the 2021 call for coordinated control plans on anti-microbial resistance. In total, for these programmes, the Agency signed 128 grants for a total budget of EUR 279,76 million.

Three other calls and one preparatory action related to the 2021 work programme were launched and finalised in 2022.

In addition, the Agency launched three calls from the 2022 work programme (16) and two calls from the 2023 work programme (17). The resulting grant agreements will be signed in 2023.

Onboarding to eGrant

One important achievement of 2022 was the onboarding and use of the corporate IT tool eGrant for the SMP Food programme actions. The onboarding was technically challenging and required efforts both from HaDEA staff and the beneficiaries, most of which were using this IT tool for the first time.

The Agency launched seven calls through eGrant in 2022. The transition to the new platform caused delays for certain types of operations. For instance, the model grant agreements for the phytosanitary programmes could not be finished in time to meet the time-to-grant target.

Procurements

HaDEA launched five new calls for tenders in 2022, including three calls for tender for the Better Training for Safer Food (BTSF) initiative, a contract to support the revision of rules on Food contact materials, as well as a study on the treatment of Equidae. Five additional contracts were signed to ensure the functioning of the BTSF-Academy, covering notably the costs of IT consultants and cloud services.

(15) Covered by the 2021 and 2022 budgets respectively.

(16) On AMR coordinated control plans; on the implementation of the collection and reporting of data on sales and use of antimicrobials in animals for the period 2022-2027; and on “Contributing to more sustainable food production systems by boosting Member States’ capacities to evaluate and remove from the market unsafe pesticides and biocides. The latest was initially planned as a procurement under the 2021 work programme but was modified as a grant to the 2022 work programme.

(17) Related to the veterinary and phytosanitary programmes.
Finally, HaDEA reached an agreement with DG SANTE concerning the return to DG SANTE of contracts relating to the EU animal health vaccine banks. Two procurement activities of the 2022 work programme were thus transferred back to DG SANTE.

Project management

In addition to the new actions, HaDEA continued to manage the legacy transferred by DG SANTE at its creation, executing payments and reviewing reports submitted by the beneficiaries.

In the framework of the BTSF actions, where the start of the second phase of contracts is subject to the successful implementation of the first phase, the Agency gave the green light to initiate the second phase to five contracts, for a total of EUR 4.64 million.

Communication

To ensure the visibility of the Programme, HaDEA promoted the calls for proposals and tenders on the HaDEA website and social media accounts. The Agency also took the opportunity of international days related to food safety to promote relevant projects.

Feedback to policy

In 2022, colleagues in the Agency and the parent DG(s) worked on the preparation of the first annual feedback-to-policy plan.

The feedback to policy actions took place as agreed in the approved plan and consisted in several reports from HaDEA to DG SANTE, most particularly in the field of veterinary and phytosanitary programmes (note on the outcome of the approved programmes and related budget), BTSF (monitoring of the implemented activities) or new activities on Farm to Fork (notably on the state of play of the actions and applications received).

1.4. Digital Europe Programme

The Digital Europe Programme (DIGITAL) aims to strengthen the EU’s digital sovereignty, by reinforcing key capacity areas through strategic deployments in artificial intelligence (AI), cybersecurity, high-performance computing, data infrastructure, governance and processing.

Call management

The first set of calls under DIGITAL covered specific objectives (SOs) related to Advanced digital skills (SO4) and to Deployment, best use of digital capacities and interoperability (SO5) closed on 22 February 2022.

The second set of calls opened the next day. In addition to SO4 and SO5, this second call also covered Data space for cultural heritage (deployment) (SO2). The call deadline for all topics under this set of calls was 17 May 2022. Upon request from DG CONNECT, the call deadline for one of the topics was postponed to 17 August 2022. This resulted in extra
communication efforts to promote the revised deadline and the handling of queries related to the extension of the application window.

Despite the tight deadlines due to the late adoption of the work programme 2021-2022, and the change of deadlines, HaDEA successfully finalised the remote evaluations for all the calls with the support of external experts.

Finally, HaDEA launched on 29 September 2022 the third and last call under the work programme 2021-2022, related to SO4. This call will close in January 2023.

The grant agreement preparation process for the first and second set of calls (except for the one topic whose deadline had been postponed) were concluded well before the time-to-grant deadline. 58 grant agreements were signed under DIGITAL.

**Legacy activities: Connecting Europe Facility - 1 Telecom**

HaDEA continued implementing the legacy activities of the Connecting Europe Facility - 1 (CEF-1) Telecom programme. This programme facilitates cross-border digital interaction between public administrations, businesses and citizens by deploying Digital Service Infrastructures (DSIs).

Several topics covered by CEF Telecom are supported under DIGITAL as well. HaDEA made sure to use the unique expertise acquired in managing CEF for the implementation of DIGITAL, and notably for the drafting of the related call texts.

At the end of 2022, HaDEA was managing about 250 ongoing CEF-1 projects, ensuring the financial and technical monitoring of those, including the organisation of remote validation meetings, the processing of amendments and final payments as well as the identification of relevant information for policy feedback to the respective parent DGs.

Almost 100 final payments were made over 2022, with an average net time to pay of 65 days. Approximately 100 amendments were processed in the same period, more than half of them related to the extension of the actions’ durations, due to – among others – requirements for technical audits from the Commission, reshuffling of the beneficiaries’ internal IT priorities or resources, and pressure on cybersecurity actions further to the Russian war of aggression against Ukraine. The late adoption of DIGITAL’s work programme in 2021 and the subsequent delayed call publication were also invoked as a ground to request project extensions.

Synergies and complementarities with other programmes managed by HaDEA were investigated, notably in relation to the support to the eHealth European Reference Networks. Moreover, CINEA (\(^\text{(19)}\)) colleagues in charge of CEF Transport were informed of the successful projects dealing with cybersecurity for automated vehicles.

\(^{\text{(19)}}\) CINEA is the European Climate Infrastructure and Environment Executive Agency and implements the “Transport” strand of Connecting Europe Facility (amongst other programmes).
Promotion and dissemination

For DIGITAL, communication activities focused mostly on calls’ promotion and on the dissemination of the results of the calls. HaDEA also promoted the participation of the Digital Product Passport (DPP) project to the COP27 session “Innovation to serve enhanced circularity”.

Legacy projects were promoted through dedicated monthly campaigns. For example, on Safer Internet Day in February, testimonial videos from three Safer Internet Centres were published on the HaDEA website and promoted via social media. In October, internal and external communication focused on cybersecurity, on the occasion of the ‘cybersecurity month’. HaDEA also prepared and published a promotion brochure including figures on coverage of the infrastructures by Member State and success stories, in cooperation with CINEA.

Feedback to policy

The Agency prepared its first annual feedback-to-policy plans in cooperation with its parent DG. To draft the feedback-to-policy plan for DIGITAL, DG CONNECT and HaDEA drew on the experience in managing the CEF Telecom programme. Regarding legacy activities, DG CONNECT and HaDEA agreed to use the feedback-to-policy performance framework set up in 2019. This framework defined the main principles of cooperation and the key indicators to monitor the state of play of DSIs.

Activities performed in 2022 included communication on the lessons learnt after the first two calls under DIGITAL. As for CEF Telecom, they included the update and publication of country and DSI fiches, the encoding of indicators per closed project, ad hoc meetings with the policy units from the DGs involved, and the mapping of synergies and complementarities with CEF Transport.

1.5. Connecting Europe Facility: Digital

The objective of the CEF-2 Digital programme (2021-2027) is to support large-scale projects deploying high-capacity digital infrastructures (notably backbone networks), as well as 5G systems in cross-border areas.

Call management and evaluation

HaDEA launched the first calls of the CEF Digital programme on 12 January 2022, less than a month after the adoption of the work programme 2021-2025 and closed on 20 April 2022. The topics covered by the five calls ranged from 5G for Transport Corridors, and 5G for Smart Communities, to Cloud Backbone Infrastructure, Digital Global Gateways and Coordination and support actions for Operational Digital Platforms, Strategic Deployment Agenda for 5G in Europe and Integration of 5G with edge computing and federated cloud facilities.
The evaluation of the calls took place from May to end of June 2022. Specific input was provided by digital security experts to ensure the integration of the high digital security standards set in the programme.

HaDEA launched a second wave of six calls for proposals in October 2022. These calls cover an additional topic, namely European Quantum Communication Infrastructure (EuroQCI), targeting the deployment of quantum communication infrastructure. The deadline to submit proposals for these calls is set to March/April 2023.

Project management

The grant agreement preparation process for the first set of calls took place from September to December 2022. The **ownership and control assessment** of the participants in the backbone calls performed by the Central Validation Services (REA) led to changes in the set-up of some consortia and the termination of the preparation of five grant agreements.

A total of 38 grant agreements were successfully signed by 21 December 2022, well ahead of the time-to-grant deadline.

Promotion and dissemination

Virtual info days were held to promote the first two waves of calls for proposals. The calls were also promoted on the HaDEA website and social media accounts.

Feedback to policy

Upon request of DG CONNECT, HaDEA actively participated in events with external stakeholders, raising the visibility of the Programme and of the Agency to external audiences.

In January 2023, HaDEA delivered to DG CONNECT its first report on lessons-learnt from CEF-Digital calls’ evaluations (Call-1), presenting the challenges encountered and possible solutions for future calls.

**Legacy activities: WiFi4EU initiative (Connecting Europe Facility – CEF-1 Telecom 2014-2020)**

In 2022, the Agency pursued the implementation of the WiFi4EU initiative, which aims to provide free Wi-Fi for all Europeans. Since the start of the initiative, 8,802 municipalities across Europe – representing 10% of all municipalities – were awarded a voucher of EUR 15,000 each to deploy local wireless internet connectivity in public places, with an overall budget of EUR 132 million.

Project management and communication activities

Several measures were put in place to encourage effective implementation by the municipalities, such as the organisation of webinars, phone call and postal letter campaigns to reach beneficiaries and Wi-Fi installation companies. To address the persistent adverse
effects of the Covid-19 pandemic on the supply chain shortages of Wi-Fi equipment, HaDEA put in place a flexible mechanism for municipalities to request an extension of their implementation deadlines. In total in 2022, HaDEA granted 264 extensions of the implementation period.

At the end of 2022, HaDEA was managing a portfolio of 7 269 actions (EUR 109 million) corresponding to 9 107 deployed WiFi4EU networks (19).

* with a peak of 7 million users in August 2022.

To ensure the promotion of the initiative, the Agency published a range of customisable new social media visuals that allow the tailoring to different languages. Finally, the WiFi4EU initiative continues to be put in the spotlight through interviews with mayors and other municipalities representatives (20) spreading the word about the success of the initiative.

Policy feedback and support and relations with DG CONNECT

The first feedback-to-policy plan was agreed by the Agency and the parent DG CONNECT in June and five out of six actions had been successfully delivered by the end of the year.

In 2022, HaDEA further developed WiFi4EU-specific dashboards to monitor the operational and financial implementation of the initiative, thus providing DG CONNECT with full access to a wide range of statistics and graphs that can be used for the DG’s own policy reporting and communication needs. In addition, HaDEA provided DG CONNECT with regular reports on performed actions, notably in relation with plans to encourage implementation.

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(19) One municipality can deploy more than one WiFi4EU network.

(20) Related content | Shaping Europe’s digital future (europa.eu).
2. MODERN AND EFFICIENT ADMINISTRATION AND INTERNAL CONTROL

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 system on a continuous basis, and by internal and external auditors. The results are explicitly documented and reported to the Director. The following reports have been considered:

- the reports from authorising officers by sub-delegation (and also from the Common Implementation Centre (“CIC”) to all research related services);
- the results of the annual risk assessment exercise;
- the reports on recorded exceptions, non-compliance events and any cases of ‘confirmation of instructions’ (Art 92.3 FR);
- the outcome of ex-post audit and anti-fraud activities;
- the observations and the recommendations reported by the European Court of Auditors (ECA);
- the results of the corporate indicators reported in the Annex 4.

The contribution of the Internal Audit Service on the state of internal control is not applicable for HaDEA in 2022.

The systematic analysis of the available evidence provides sufficient guarantees as to the completeness and reliability of the information reported and results in the full coverage of the budget delegated to the Director of HaDEA.

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 system, and resulting in 2.1.4 Conclusions on the assurance.

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)\(^{(2)}\). The Agency’s assurance building and materiality criteria are outlined in Annex 5, both for legacy

\(^{(2)}\) 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).
programmes (2014-2020) and current programmes (2021-2027). 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, which are applicable to legacy and current programmes.

This Agency’s assurance is built around the principles of effectiveness, efficiency and economy. This section demonstrates how HaDEA applied these principles. The controls focus mainly on the legality and regularity of transactions, as well as on fraud prevention, detection and correction. Ex-ante and ex-post controls are carried out through the following four stages:

1) Programming, evaluation and selection of proposals;
2) Contracting, grant agreement preparation;
3) Monitoring of the execution;
4) Ex-post controls/audits.

These stages are applicable to both the legacy programmes and the new programmes, taking into account the level of maturity of each programme. The assurance building process reflects the principles and corporate guidance, adapted to the specificities of each programme.

Expenditure overview

The figures below present an overview of HaDEA’s expenditure per activity (grants, procurement and experts) and per programme.

Grants cover 98% of HaDEA’s expenditure whereas 2% of the Agency’s budget was spent on procurement and experts in 2021. The share of legacy programmes has decreased from 95.3% in 2021 to 28.5% of the total expenditure for grants, while the new programmes represent 71.5% (Horizon Europe 61.4%, Single Market Programme: food 4.3%, EU4Health 2.6%; Digital Europe Programme 2% and CEF 2 – Digital 1.3%).

**OPERATIONAL BUDGET**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Amount paid (million EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizon Europe – Cluster 4</td>
<td>987,822</td>
</tr>
<tr>
<td>Horizon 2020 (legacy)</td>
<td>717,674</td>
</tr>
<tr>
<td>Horizon Europe – Cluster 1</td>
<td>698,940</td>
</tr>
<tr>
<td>SMP Food</td>
<td>118,065</td>
</tr>
<tr>
<td>EU4Health</td>
<td>97,899</td>
</tr>
<tr>
<td>Digital Europe Programme</td>
<td>55,365</td>
</tr>
<tr>
<td>CEF 1 – Telecom (legacy)</td>
<td>40,955</td>
</tr>
<tr>
<td>CEF 2 – Digital</td>
<td>35,732</td>
</tr>
<tr>
<td>Third Health Programme (legacy)</td>
<td>23,276</td>
</tr>
<tr>
<td>Food &amp; Feed (legacy)</td>
<td>19,675</td>
</tr>
<tr>
<td><strong>Total paid</strong></td>
<td><strong>2 795,404</strong></td>
</tr>
</tbody>
</table>

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ADMINISTRATIVE BUDGET

In addition, the Agency has its own administrative budget for which it receives from the EU an annual budget. The administrative budget covers the running costs of the Agency, mainly staff expenditure, office related costs, IT and other services. In 2022, HaDEA implemented 98.6% of its commitment appropriations. The final rate of implementation for payments is 92.3% (EUR 43.3 million).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount paid (million EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>2 745.37</td>
</tr>
<tr>
<td>Procurement</td>
<td>47.17</td>
</tr>
<tr>
<td>Other (experts)</td>
<td>2.86</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2 795.40</strong></td>
</tr>
</tbody>
</table>

In line with the 2018 Financial Regulation, HaDEA's assessment for the new reporting requirement is as follows:

- HaDEA had no cases of "confirmation of instructions" (new FR art 92.3);
- There were no cases of financing not linked to costs (new FR art 125.3);
- There were no Financial Framework Partnerships with a duration of more than 4 years (new FR art 130.4);
- With regards to cases of flat-rates >7% for indirect costs (new FR art 181.6): HaDEA manages grants under Horizon 2020 and Horizon Europe. The basic acts of these programmes provide for a 25% flat rate for indirect costs, by derogation to the Financial Regulation (22).


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254 cases of "Derogations from the principle of non-retroactivity" [of grants] pursuant to Article 193 FR' (new Financial Regulation Article 193.2). See Annex 7 for more details.

1. Effectiveness of controls

This section describes the effectiveness of the control system for the main expenditure items, i.e., direct grant management, unless indicated that it applies also for the other expenditure items. The effectiveness of the control systems assessed is based on (i) the legality and regularity of transactions, (ii) fraud prevention, protection and detection measures and (iii) other control objectives, namely safeguarding of assets and information and reliability of reporting.

a) Legality and regularity of the transactions

HaDEA uses internal control processes to ensure sound management of 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.

STAGE 1: PROGRAMMING, EVALUATION AND SELECTION OF PROPOSALS

The first stage concerns the preparation and the publication of the calls for proposals and the subsequent evaluation of the received proposals. The overall control objective of this stage is to ensure that the most promising projects, meeting the policy objectives, are among the selected proposals. To achieve this control objective, HaDEA has put in place a set of rules and procedures that are objective, transparent and ensure equal treatment of all applicants.

The selection process implies an initial screening of the submitted proposals to assess their admissibility and eligibility. In a second stage, the eligible proposals are evaluated by an independent evaluation panel. An adequate evaluation review procedure is put in place in case of complaints regarding the evaluation. The aim of all steps in this process is to ensure a robust and transparent selection which in turn will guarantee the highest value for money return.

Several qualitative benefits have been identified: a well-designed work programme and widely published calls appeal to a larger number of good quality projects, out of which the very best can be chosen. Expert evaluators bring independence, state-of-the-art knowledge and a range of different opinions, which has a positive impact on the whole project cycle. Selection controls ensure that the most merited projects are funded.

For further details of cost-effectiveness ratios for proposals and evaluation review requests, see Annex 7.
STAGE 2: GRANT PREPARATION/CONTRACTING

After a sound and transparent selection process, the next stage consists of formalising the contractual side of the selected proposals. The overall control objective of this stage is to translate each of the selected proposals into legally binding grant agreements, allowing for the management of both the scientific and financial aspects of the projects and to ensure the best value for money output for each of the contracted projects. This stage is referred to as the "grant agreement preparation" process, which may result in grant reductions compared to the initial proposals.

From a qualitative perspective, the whole committed budget is checked for appropriateness (actions not directly related to the achievement of programme objectives are thus excluded), as well as enhancing the prevention of future errors and leading to a higher assurance on the achievement of the project objectives and results.

In 2022, the related quantitative benefits are estimated at EUR 240,82 million which corresponds to funds not contracted, due to reductions made at grant agreement preparation stage. Further details are available in Annex 7.

STAGE 3: MONITORING THE EXECUTION

The overall control objective of this stage is to ensure that the projects are performing according to their schedule and that the financial operations comply with regulatory and contractual provisions. The execution of the projects is monitored through different tools, ex-ante controls being one of the most important ones at the time of cost claims submitted by the beneficiaries.

The qualitative benefits of this stage are the following: monitoring, processing amendments and scrutinising costs claimed by beneficiaries contribute to the legality and regularity of the transactions. While the benefits of this stage materialise mainly in financial terms, the qualitative benefits generated by these controls are prevention of errors and deterrent effect of controls leading to an overall improvement of the financial efforts carried out by the Agency.

In 2022, 2.63% of costs over the amount claimed were detected and rejected in ex-ante controls, corresponding to EUR 47,58 million. Further details are available in Annex 7.

STAGE 4: EX-POST CONTROLS/AUDITS

The ex-post controls (audits) are carried out on the costs declared to the Agency. Their objective is to verify the legality and regularity of the underlying transactions and consequently, the final eligible EU contribution of the grants.

The main indicator used to assess the legality and regularity of the transactions is the residual error rate detected by ex-post audits.
The final control objective is to have a cumulative residual error rate which does not exceed 2% for the programmes managed by the Agency (23). In 2022, the programmes audited were CEF Telecom, the Third Health Programme, the Food and Feed Programme (24), and Horizon 2020. The state of play is assessed annually, taking into account the results of the implementation of ex-post audit strategies, the frequency and significance of the errors detected, as well as a cost-benefit analysis of the effort needed to detect and correct them. An explanation of the methodology for ex-post controls for each programme managed by the Agency is provided in Annex 5, while details of the sources and results of the controls are provided in Annex 7.

Multi-annual error rates per programme at the end of 2022 are shown in the table below:

<table>
<thead>
<tr>
<th>Programme (23)</th>
<th>Detected error rates</th>
<th>Residual error rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizon 2020</td>
<td>2.71%</td>
<td>1.86%</td>
</tr>
<tr>
<td>CEF Telecom</td>
<td>3.91%</td>
<td>3.28%</td>
</tr>
<tr>
<td>Third Health Programme</td>
<td>1.96%</td>
<td>1.88%</td>
</tr>
<tr>
<td>Food and Feed</td>
<td>1.36%</td>
<td>1.20%</td>
</tr>
</tbody>
</table>

Overall, HaDEA’s portfolio consists of segments with a relatively low error rate, i.e., the Third Health Programme and the Food and feed programme, and segments with a relatively high error rate, such as Horizon 2020 and CEF Telecom DSI grants.

This is mainly due to the inherent risk profile of the programmes and the complexities of the funding modalities of the programmes Horizon 2020 and CEF Telecom (and notably regarding the reimbursement of eligible costs).

For the Horizon 2020 and CEF Telecom DSI segments, most of the errors relate to incorrect claims for personnel costs that are mainly due to the beneficiaries’ lack of understanding of the rules. SMEs and private entities inexperienced in the financial management of EU funds are indeed more prone to this type of errors.

For the CEF Telecom DSI segment, the multi-annual residual error rate at the end of 2021 was at 3.84%, above the materiality threshold of 2%. In this respect, a reservation was introduced last year.

(23) For Horizon 2020: a detected error rate ranging from 2% to 5% and as close as possible to 2% after corrections.

(24) On an annual basis for the Food and feed programme due to the design of the programme and in line with the approach applied by DG SANTE.

(25) As the new programmes did not reach yet the corresponding level of maturity, with no interim or final payments performed in 2022 for Digital Europe Programme, Connecting Europe Digital and a limited number of interim or final payments on EU4Health and Horizon Europe, there are no audit results available for the new programming period. As regards Single Market programme, grants are implemented mainly via lump sum grants, not subject to financial audits.
To prevent, detect and correct the errors earlier in the project lifecycle, both the predecessor Agency INEA and HaDEA adopted and implemented several remedial actions, both at (1) ex-ante level, mainly by updating the guidelines on costs eligibility under CEF Telecom and through increase communication campaigns towards the beneficiaries; and, (2) at ex-post level, by increasing audit coverage, by monitoring and analysing closely the identified findings and sharing these with colleagues working on the ex-ante audits. In 2022, the residual error rate decreased but remained above the 2% materiality threshold at 3.28%. Nevertheless, as the necessary improvements and reinforcements have been implemented, as the risks are being appropriately monitored and mitigated and as the implementation of the remedial measures have demonstrated their efficacy (as demonstrated by the drop in the error rate), the identified weaknesses are not considered as significant in terms of monetary loss or possible reputational risks. See Annex 7 and 9 for further details.

As regards Horizon 2020, given the results of the audit campaign, and the observations made by the European Court of Auditors in its Annual Reports, the Common Implementation Centre introduced further simplification, such as the increased use of simplified forms of funding (including lump sums and unit costs), 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. In addition, in relation to Horizon Europe, the Common Implementation Centre, in close cooperation with central Commission services, defined actions aimed at significantly simplifying the rules, and paving the way for a significant reduction of the error rate, including the use of a corporate model grant agreement and its annotations.

In addition, HaDEA has put in place an effective mechanism for correcting errors, through ex-ante and ex-post controls, resulting in preventive and corrective measures, respectively. Please see table below for details:

<table>
<thead>
<tr>
<th></th>
<th>Preventive measures (m EUR)</th>
<th>Corrective measures (m EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HaDEA total</td>
<td>11.63</td>
<td>3.21</td>
</tr>
</tbody>
</table>

During the reporting year, the executed corrective capacity amounted to a total of EUR 14.84 million, representing 0.80% of the relevant expenditure. The benefit of ex-ante controls amounts to EUR 11.63 million across all programmes managed by the Agency, whilst recoveries and financial corrections following the results of ex-post controls amounted to EUR 3.21 million.

Based on all the above, HaDEA presents in the following Table X an estimation of the risk at payment and risk at closure for the expenditure managed during the reporting year:
Table X: Estimated risk at payment and at closure (amounts in EUR million)
The full detailed version of the table is provided in Annex 9.

<table>
<thead>
<tr>
<th>HaDEA</th>
<th>Payments made</th>
<th>Relevant expenditure</th>
<th>Estimated risk (error rate %) at payment</th>
<th>Estimated future corrections and deductions</th>
<th>Estimated risk (error rate %) at closure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>m EUR</td>
<td>m EUR</td>
<td>m EUR %</td>
<td>m EUR %</td>
<td>m EUR %</td>
</tr>
<tr>
<td><strong>Operational budget</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants 2021-27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizon Europe</td>
<td>1.68455</td>
<td>0.14</td>
<td>2.00%</td>
<td>0.00%</td>
<td>2.00%</td>
</tr>
<tr>
<td>Connecting Europe Facility (CEF) - Digital</td>
<td>35.63</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Digital Europe Programme</td>
<td>55.15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Single Market Programme - Veterinary medicine</td>
<td>75.74</td>
<td>0.38</td>
<td>0.50%</td>
<td>0</td>
<td>0.38</td>
</tr>
<tr>
<td>Single Market Programme - laboratory, AMR, plant health</td>
<td>41.38</td>
<td>21.33</td>
<td>0.29</td>
<td>1.36%</td>
<td>0.03</td>
</tr>
<tr>
<td>EU Health Programme</td>
<td>71.05</td>
<td>1.05</td>
<td>0.02%</td>
<td>0.08%</td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>Grants 2014-20</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horizon 2020</td>
<td>717.67</td>
<td>1.53655</td>
<td>41.64%</td>
<td>2.71%</td>
<td>13.06%</td>
</tr>
<tr>
<td>Connecting Europe Facility (CEF) - Telecom - DIS</td>
<td>17.25</td>
<td>40.26</td>
<td>1.56</td>
<td>3.91%</td>
<td>0.10</td>
</tr>
<tr>
<td>Connecting Europe Facility (CEF) - Telecom - WP4EU</td>
<td>22.76</td>
<td>22.76</td>
<td>0.11</td>
<td>0.50%</td>
<td>0</td>
</tr>
<tr>
<td>Third Health Programme</td>
<td>14.91</td>
<td>37.55</td>
<td>0.74%</td>
<td>1.96%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Food and Feed Programme</td>
<td>8.88</td>
<td>9.85</td>
<td>0.13%</td>
<td>1.56%</td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>Procurements</strong></td>
<td>47.17</td>
<td>47.62</td>
<td>0.24%</td>
<td>0.50%</td>
<td>0</td>
</tr>
<tr>
<td>Experts (evaluation &amp; monitoring)</td>
<td>2.66</td>
<td>2.66</td>
<td>0.01</td>
<td>0.50%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>2,795.40</td>
<td>1,802.78</td>
<td>45.28%</td>
<td>2.51%</td>
<td>13.30%</td>
</tr>
<tr>
<td><strong>Operating budget</strong></td>
<td>453</td>
<td>453</td>
<td>0.22%</td>
<td>0.50%</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total HaDEA (operational + operating)</strong></td>
<td>2,888.71</td>
<td>1,846.08</td>
<td>45.50%</td>
<td>2.46%</td>
<td>13.30%</td>
</tr>
</tbody>
</table>

The estimated overall risk at payment for the 2022 expenditure amounts to EUR 45.50 million, representing 2.46% of the Agency’s total relevant expenditure for 2022.

The estimated overall risk at payment for 2022 expenditure 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. This amount of EUR 13.30 million corresponds to the conservatively estimated future corrections for 2022 expenditure.

The difference between those two amounts (45.50-13.30) results in the estimated overall risk at closure (26). Compared to 2021, when the estimated overall risk at closure was 1.68%, there is an increase of 0.06, which is negligible.

For an overview at Commission level, the services’ estimated overall risk at payment, estimated future corrections and risk at closure are consolidated in the Annual Management and Performance Reports (AMPR).

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(26) This is the AOD’s best, conservative estimation of the expenditure authorised during the year that would remain not in conformity of applicable regulatory and contractual provisions by the end of implementation of the programme.
b) Fraud prevention, detection and correction

HaDEA has developed its own anti-fraud strategy and action plan in 2021\(^{(27)}\), based on the methodology provided by the European Anti-Fraud Office (OLAF). During September-November 2022 HaDEA performed its annual review of the fraud risk assessment. The review exercise confirmed that HaDEA has adequate controls in place, adapted to its control environment and to the risks identified. Therefore, HaDEA considers that its anti-fraud strategy remains fully applicable.

The Agency monitors the implementation of the action plan and provides regular reports to the management. All planned actions have been initiated, some of them completed. In four cases (21%) the targets have been partially achieved\(^{(28)}\). The Agency will continue to implement the actions for which the targets were not fully achieved. Their completion is expected for 2023. Details are provided in Annex 7.

HaDEA also contributed to the Commission’s anti-fraud strategy and followed up on OLAF’s financial recommendations with the following results: in four cases, the recommendations are currently under implementation, in one case, the recommendations are partially implemented and another case is still under analysis.

HaDEA has taken action in the following areas targeting fraud prevention, detection and correction:

- Ethical behaviour of staff;
- Awareness of fraud risks for programme and financial Officers;
- Good cooperation with stakeholders;
- Timely implementation of OLAF recommendations.

The results achieved during the year are described in more detail in Annex 7.

On the basis of the information available, HaDEA has reasonable assurance that the anti-fraud measures in place are effective and that an adequate fraud prevention, detection and correction system is in place.

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

As of 31 December 2022, HaDEA identified current assets (inventories) for a total value of EUR 4,108,500 (Contract for supplies HaDEA/2022/NP/0014 – Supply of Modified Vaccinia Ankara against Monkeypox). The contract is related to the supply of vaccines for

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\(^{(27)}\) Approved by the Interim Director on 17/12/2021 and adopted by the Steering Committee on 24/02/2022.

\(^{(28)}\) 21% corresponds to four activities (out of 19 as outlined in the anti-fraud strategy action plan: three of these activities are related to trainings (on fraud risk awareness, procurement, ethics and integrity, respectively), and to the conclusion of the EPPO agreement.
monkeypox, marketed under the commercial name of “Jynneos”, and their distribution to delivery points in the Member States, Iceland, and Norway.

The assets pertain to stocks for Monkeypox vaccines that are put in consignment on behalf of the European Commission and have not been sent to the relevant countries by the end of 2022. Consequently, the European Commission becomes the owner of those vaccines. The vaccines will be out of the stock as soon as they are transmitted to the corresponding countries (in 2023).

The main aim of accounting controls is to assure the quality and reliability of the accounts and underlying transactions through methodical checks on the accounting records (data) and timely communication and correction of the errors.

HaDEA ensured proper safeguarding of the inventories was ensured throughout the year through the close collaboration of the unit responsible for the operational budget, the IT sector and the accounting team. Two meetings were organised to map the list of assets/inventory in HaDEA (if any).

In conclusion, HaDEA considers the current control arrangements for accounting and financial reporting to be sufficient.

### 2. Efficiency of controls

The Agency uses the following three indicators to assess efficiency in programme implementation and budget execution: time-to-inform, time-to-grant and time-to-pay. A short description of the status of each indicator can be found below. Detailed information per activity can be found in Annexes 2 and 4.

- **Time to inform**: the time to inform applicants was respected in all cases.

- **Time to grant**: 92% of the grant agreements were signed within deadlines. The time to grant limit was respected for most of the grants signed. The discrepancy with HaDEA’s target of 98% can be explained by the uncertainty about the participation of UK organisations, which led to last-minute changes in the consortia, and by the lengthy and complex ownership and control assessment required for the signature of projects of some programmes.

- **Timely payments**: HaDEA paid 100% of its operational appropriations on time, demonstrating an effective monitoring of payment deadlines.
Timely payments – Operational budget

<table>
<thead>
<tr>
<th>Timely Payments</th>
<th>HADEA Score</th>
<th>EC Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>100%</td>
<td>98%</td>
</tr>
</tbody>
</table>

**Timely payments – Administrative budget**

100% of the payments related to the administrative budget were made on time. HaDEA managed to ensure efficiency in processing payments, thanks to a good monitoring and prioritisation of the processing of payments during the year.

- **Time to pay**: HaDEA’s net payment time in 2022 is 25 days, all transactions included.

### 3. Economy of controls

The table below provides an estimate of the total costs of control for direct grant management within HaDEA. The cost of controls is estimated for each of the four stages of direct grant management control system. It was calculated based on the corporate methodology for the estimation, assessment and reporting on the cost-effectiveness of controls. The details of the calculation are available in Annex 7.

**The total cost of control within HaDEA for direct grant management can be evaluated at** approximately EUR 39.31 million, corresponding to **1.41% of the total operational grant payments made in 2022** (EUR 2,795.40 million).

<table>
<thead>
<tr>
<th>HaDEA costs of controls grant management</th>
<th>Costs (M€)</th>
<th>Operational Payments 2022 (M€)</th>
<th>Overall rate (total costs/total amount paid)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal costs</td>
<td>External costs</td>
<td>Total</td>
</tr>
<tr>
<td>Stage 1 – programming and evaluation</td>
<td>5.73</td>
<td>0.65</td>
<td>6.39</td>
</tr>
<tr>
<td>Stage 2 – contracting</td>
<td>3.92</td>
<td>0.06</td>
<td>3.98</td>
</tr>
<tr>
<td>Stage 3 – monitoring the execution</td>
<td>24.99</td>
<td>2.63</td>
<td>27.62</td>
</tr>
<tr>
<td>Stage 4 – ex-post controls and recoveries</td>
<td>0.99</td>
<td>0.33</td>
<td>1.31</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>35.63</strong></td>
<td><strong>3.67</strong></td>
<td><strong>39.31</strong></td>
</tr>
</tbody>
</table>
Details of the estimated cost related to shared/pooled control activities carried out by REA and hosted by DG RTD (Common Implementation Centre; Common Audit Service; Common Policy Centre) for the Research and Innovation family are reported in the Annual Activity Reports of REA and DG RTD.

The evolution of the estimated cost of control is presented in the table below. The decrease of the overall rate in 2022 is linked mainly to the increase of the total operational grant payments from EUR 1 363.37 million in 2021 to EUR 2 795.40 million in 2022.

<table>
<thead>
<tr>
<th>HaDEA costs of controls grant management</th>
<th>Overall rate 2022</th>
<th>Overall rate 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 – programming and evaluation</td>
<td>0.22%</td>
<td>0.36%</td>
</tr>
<tr>
<td>Stage 2 – contracting</td>
<td>0.14%</td>
<td>0.21%</td>
</tr>
<tr>
<td>Stage 3 – monitoring the execution</td>
<td>0.99%</td>
<td>1.31%</td>
</tr>
<tr>
<td>Stage 4 – ex-post controls and recoveries</td>
<td>0.05%</td>
<td>0.07%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1.41%</strong></td>
<td><strong>1.94%</strong></td>
</tr>
</tbody>
</table>

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

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

When comparing the cost of controls (EUR 39.31 million) with the total operational payments made in this control environment in 2022 (EUR 2,795.40 million), the ratio is set at around 1.41%.

Cost of controls is decreasing compared to 2021 (at 1.94%), mainly due to the increase in the total operational budget managed by the Agency, and notably that of the new programmes managed by the Agency.

The analysis shows that the total benefits of controls significantly counterbalance their overall costs. The effectiveness and efficiency of controls are in line with the objectives set for the programmes implemented overall, and proportionate with the underlying risks.

The control system in place is suitable to fulfil the intended objectives efficiently, and at reasonable cost. This is attested by the satisfactory balance between error rates established within the expected targets (29), swift time-to-pay and low costs of controls.

### 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.

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(29) With the exception of CEF Telecom legacy programme, for which the residual error rate is at 3.28% and which falls within the *de minimis* rule.
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.

Audits from the Internal Audit Service (IAS)

The IAS did not issue any audit reports for HaDEA in 2022. Three IAS audits have been launched in 2022 and will be finalised in 2023 (30). Therefore, the IAS stated that there is no element to report nor contribution to provide for the 2022 annual activity report (31).

Audits from the European Court of Auditors (ECA)

A) OPERATIONAL BUDGET

Following the transfer of the files from the predecessor DGs/Agencies, HaDEA has undertaken corrective actions to address the audit findings accepted by the Commission.

In the framework of the statement of assurance (DAS) 2021, the European Court of Auditors closed 16 transactions related to HaDEA’s portfolio in 2022 (32), with the following findings:

- In nine cases there were no findings detected;
- Financial errors were detected in the remaining seven cases, most of them related to the personnel costs’ category. For details see Annex 7.

Except for one case, the ECA concluded that all audit findings were “not detectable” by the Commission services.

In the annual report on the implementation of the EU budget (33), the ECA recommended certain improvements related to the quality of the audit process addressed to the Research and Innovation family. Following the recommendation of the ECA the Commission reinforced or introduced several actions to remedy the risks identified by the ECA. The Court has acknowledged all these efforts to improve the quality of audits and considers its recommendation to be fully implemented.

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(30) (i) Multi-DG/EA audit on Horizon Europe governance arrangements, preparation of the work programmes and of budget planning, allocation and monitoring, (ii) Horizon Europe - Grant management phase 1 (batch II: HADEA, ERCEA) (from publication of the calls until signature of the grant agreements), (iii) Audit on the design and set-up of the Digital Europe Programme (HADEA, CONNECT).

(31) See Ares(2023)1133673.

(32) Six transactions related to Horizon 2020 and one related to CEF Telecom programme.

(33) In Chapter 4, ‘Competitiveness for growth and jobs’.
As regards the DAS 2022, the ECA has sampled 17 transactions. The audits are still ongoing (\textsuperscript{34}).

**B) ADMINISTRATIVE BUDGET**

Regarding HaDEA, the ECA completed the DAS audit 2021. HaDEA received a clean opinion. The Court drew attention on the fact that the rental agreement with the Commission’s Office for Infrastructure and Logistics in Brussels (OIB) had not been signed yet, which means that the figures in the accounts related to the rent were estimates and resulted in an important carry-forward. The rental agreement has been signed in December 2022 and the matter is therefore solved.

The ECA will perform the DAS audit 2022 in April 2023. Both the legality and regularity of the transactions and accounts’ reliability will be audited.

As for CHAFEA, the last audit related to the accounts for the financial year 2021 took place in 2022. HaDEA, as CHAFEA’s successor agency, received a clean opinion. CHAFEA is currently under liquidation.

**C) PERFORMANCE AUDIT**

In 2021, the ECA started a performance audit on the effectiveness of the Commission’s e-government. The final audit report entitled “E-Government actions targeting businesses – Commission’s actions implemented, but availability of e-services still varies across the EU” was published in December 2022. The main auditees were DG CONNECT, GROW, DIGIT and JUST. HaDEA was involved through a sample of CEF 1 – Telecom (DSI) projects. The audit report did not include audit findings or recommendations addressed to HaDEA in particular and referred to the implementation of the CEF projects in a positive manner.

General conclusions

The Agency does not have any critical new or outstanding audit recommendations, or a combined effect of several very important recommendations, which could have a material impact on the achievement of the internal control objectives and the assurance. All audit recommendations due in 2022 have been implemented and none of them were overdue by more than six months.

2.1.3. Assessment of the effectiveness of internal control system

The Commission has 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.

HaDEA uses the organisational structure and the internal control system 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.

\textsuperscript{34} Cut-off date 19/01/2022.
As regards risk assessment, the Agency performed two risk assessment exercises (in May and October) to identify and assess risks at various levels of the Agency. The result of the exercises shows that a few risks identified during the period were still related to the set-up of a new Agency, with the related challenges it entails, in particular as regards the exponential recruitment of staff, the deployment of IT solutions for the newly delegated programmes and the achievement of HaDEA’s key performance indicators. The Agency identified and implemented appropriate measures to reduce the negative effects of the risks identified, in order to effectively continue to support the achievement of its objectives.

In line with the implementation guide of the Commission’s Internal Control Framework, HaDEA has performed a self-assessment of its internal control system during the reporting year. The Agency concluded that its internal control system is effective, and the components and principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified, related to the further development of HaDEA’s control strategy, the improvement of the procedures and the reinforcement of the follow-up of the deviations.

Several measures have already been implemented whereas others will be part of dedicated action plans targeting the areas with the identified deficiencies.

Annex 8 provides details on the assessment of the Agency’s internal control system, including the various sources of information.

HaDEA also continued internal control awareness activities in 2022, via its dedicated Internal Control network “IC Net”. Members of this network come from across the Agency to ensure that each staff member is well informed about the latest development on internal control issues, as well as to facilitate the coordination of exercises across the Agency.

2.1.4. Conclusions on the assurance

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

These reports result from a systematic analysis of the evidence available. This approach provides sufficient guarantees as to the completeness and reliability of the information reported and results in a comprehensive coverage of the budget delegated to the Director of HaDEA. This is confirmed by the statement of the Head of Department in charge of risk management and internal control in Annex 1.

The audit results, the internal control assessment and the control indicators do not reveal any significant weaknesses and do not fulfil any of the materiality criteria laid down in Annex 5 of this report.
Evolution of the 2021 AAR reservation

For the CEF Telecom DSI segment (programming period 2014-2020), the multi-annual residual error rate at the end of 2021 was at 3.84%, above the materiality threshold of 2%. Therefore, a reservation was introduced last year (39).

To prevent, detect and correct the errors earlier in the project lifecycle, both the predecessor Agency INEA and HaDEA adopted and implemented several remedial actions, which have demonstrated their efficacy as the error rate dropped. In 2022, the residual error rate decreased but remained above the 2% materiality threshold at 3.28%. Taking into account the above-described system improvements, the 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. Furthermore, the weaknesses identified are not considered significant in terms of possible reputational risks as well as in terms of monetary loss. The share of the programme significantly decreased during the year in terms of budget implementation, representing 0.62% of the total payments of the Agency. Also, the financial exposure is not significant, at EUR 1.57 million. Therefore, as both cumulative conditions for the de minimis rule are met (36), the Agency decided to lift the reservation.

The table below summarises the evolution of the CEF Telecom DSI reservation between 2021 and 2022:

<table>
<thead>
<tr>
<th>Reservation Title</th>
<th>Financial Impact (in m EUR)</th>
<th>Residual error rate 2022</th>
<th>Evolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEF telecom DSI (2014-2020)</td>
<td>2.38</td>
<td>1.57</td>
<td>Lifted (de minimis rule)</td>
</tr>
</tbody>
</table>

At the end of 2022 HaDEA had no critical, new or outstanding audit recommendations, nor a combined effect of a number of very important recommendations.

Other internal control objectives (reliable reporting, safeguard of assets and information and prevention, detection and correction of fraud and irregularities) for both expenditure and/or revenue operations were respected.

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

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(35) Despite a low financial exposure of EUR 2.38 million (well below the threshold of EUR 5.00 million), CEF Telecom DSI represented 5.23% of the total payments of the year in 2021, above the de minimis criteria.

(36) Quantified AAR reservations related to residual error rates above the 2% materiality threshold are deemed not substantial for segments representing less than 5% of the total payments of a DG/agency and with a financial impact below EUR 5 million. In such cases, quantified reservations are no longer needed.
reinforcements are being implemented. The Director, in her capacity as Authorising Officer by Delegation has signed the Declaration of Assurance.

2.1.5. Declaration of Assurance

I, the undersigned,

Executive Director of the European Health and Digital 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 (37).

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, 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 Health and Digital Executive Agency or those of the Commission.

Brussels, 31 March 2023

e-signed in ARMS

Marina Zanchi
Executive Director

(37) True and fair in this context means a reliable, complete and correct view on the state of affairs in the Executive Agency.
2.2. Modern and efficient administration – other aspects

2.2.1. Human resource management

2022 was a milestone year for HaDEA in terms of recruitment. In addition, the Agency played a key role in coordinating the development of a common multiannual Inter-Executive Agency HR Strategy based on the Commission’s HR Strategy (39). HaDEA also launched initiatives supporting a strong organisational culture to keep staff motivation high.

**Staffing**

HaDEA started the year with 331 staff in place. By 31 December 2022, HaDEA had 418 staff in place, therefore exceeding the 95% occupation rate foreseen in the work programme 2022.

<table>
<thead>
<tr>
<th>Funding source</th>
<th>Target 2022</th>
<th>Staff in place as of 31/12/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS allocation</td>
<td>421</td>
<td>411</td>
</tr>
<tr>
<td>Frontloading (Cluster 4) (39)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>EFTA and Third countries contributions (40)</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>437</strong></td>
<td><strong>418</strong></td>
</tr>
</tbody>
</table>

50 out of 51 posts of responsibility have been filled in cooperation with parent DGs (41). The Agency is close to reaching the Commission’s target of 50% of female representation in middle management positions (42).

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(39) The document will be adopted early 2023 and is expected to strengthen collaboration and to set a shared HR vision.

(39) HaDEA received and filled eight posts to reinforce the operational units working on Horizon Europe: Cluster 4 (frontloading of posts foreseen for 2023).

(40) Posts allocated to the Agency in May 2022.

(41) In coordination with parent DGs and DG HR, HaDEA reviewed its organisation chart. This resulted in two additional Heads of Sector: Unit A2 hosted an additional Sector in charge of procurement activities (A2.003) and Unit C2 re-opened a Head of Sector post (C.2.002) for which the activities were previously overseen by the Deputy Head of Unit C2.

(42) HaDEA counts 13 posts of middle management (Heads of Department and Heads of Unit), making perfect gender equality impossible to reach.
Recruitment and selection

The second half of 2022 saw a net increase in staff due to the successful completion of several recruitment procedures. In 2022, the Agency launched and coordinated about 14 external selection procedures, some of them attracting a high number of applications. Overall, HaDEA screened 2,200 applications and organised around 480 interviews. The Agency sent 153 job offers, out of which 32 led to career advancement opportunities for existing HaDEA staff. The Agency shared several of its reserve lists with other agencies and got access to some reserve lists in return. A Memorandum of Understanding between all executive agencies formalised these exchanges (cf. Section 2.2.4).

Corporate culture

In line with HaDEA’s staff survey action plan, the Agency implemented several concrete actions:

**Professional future.** New opportunities were created in 2022 under the “HaDEA Talent Programme” and the “Pilot exchange programme between executive agencies and the Commission”. The Agency has also increased the visibility and promotion of the existing Inter-Agency mobility platform.

**Work-life balance.** The Agency also started developing a HaDEA Work Etiquette tackling the efficient use of meetings and emails, a project identified through the “HaDEAns for Efficiency” initiative. Furthermore, HaDEA appointed a Mental Health first aid contact person, in accordance with HaDEA’s Prevention of Psychological Risks Strategy.

**Change & innovation.** The Agency launched “HaDEA Communities”, an initiative aiming to offer colleagues a platform to connect: some focus on cross-cutting matters (e.g. HaDEAns for Efficiency, Values Ambassadors), others on the promotion of a healthier and greener working environment while some revolve around leisure or social activities.

**HaDEA’s managerial excellence plan** was further rolled out with the 360-feedback exercise for senior and middle managers. 25 managers benefited from HaDEA’s individual coaching offer, supporting the continuous development of skills. Lastly, in a year of massive recruitments, the Agency paid particular attention to its induction plan aiming to offer new staff the quickest and smoothest on-boarding experience. For example, the Agency organised weekly monthly breakfasts with the Director and HR Ateliers.

Working conditions

In April 2022, HaDEA adopted the Commission’s Decision on Working Time and Hybrid Working Together. The Agency organised an Inter-Executive Agency info session to update staff on the new rules.

To support HaDEA’s engagement towards a positive work environment, the Agency adopted a Strategy on the prevention of psychological risks to support staff in maintaining a healthy and successful career. HaDEA organised an info session with an occupational psychologist from the European Council focusing on how to deal with stress and achieve a better work-
life balance. In the spirit of the Commission’s “Be well” programme, yoga and sport classes for staff have resumed.

Workload assessment

In 2022, HaDEA ran its first workload assessment to assess the current workload distribution within the Agency and provide estimations of the future workload. Based on the results of this exercise, the Senior Management Board decided on the re-allocation of a limited number of posts across the units in 2023, within the boundaries of the number of staff foreseen for each programme in the Agency’s specific financial statement.

Work environment

At the beginning of 2022, all HaDEA colleagues were hosted in COV2. Since then, and in line with the corporate policy on “New Ways of Working”, HaDEA gradually switched to a dynamic office space layout, by reducing office space and increasing teleworking. HaDEA set up a task force\(^{(43)}\) which oversaw the implementation of the new policy. The Agency also launched a tool for colleagues to book workstations and drafted a desk-sharing etiquette.

Between January and April 2022, the Agency gradually replaced older furniture with ergonomic furniture. In May 2022, following the announcement that HaDEA might be moving to a new building in the coming years, further investments were put on hold\(^{(44)}\).

2.2.2. Digital transformation and information management

Digital Transformation

Alignment with the EC’s corporate IT systems and governance

In 2022, HaDEA concluded the onboarding process to e-Grants for SMP Food and CEF-II, and progressed in the implementation of the core principles defined by the Commission’s Digital Strategy\(^{(45)}\) for its IT flagship system BTSF Academy\(^{(46)}\).

In line with its commitment to use corporate IT systems as a priority, HaDEA started implementing the corporate EU Academy IT system for the new European Reference Network Academy. The tool unfortunately proved not suited to the needs of the programme, and the service was terminated at the end of the year.

\(^{(43)}\) The task force is composed of representatives from across the Agency and from the staff committee

\(^{(44)}\) With some exceptions, e.g. the equipment of two meeting rooms and 14 managers offices for hybrid meetings.


\(^{(46)}\) See the performance table in Annex 10.
The newly created IT Steering Group and IT Management Board met three times: first, to discuss and approve the IT investment plan 2022-2023; a second time to review the progress made mid-term; and a third time to approve the IT investment plan 2023-2024.

Furthermore, HaDEA made substantial progress with regards to IT governance, by declaring all existing projects in GovIS2 and ensuring that all new projects are fully compliant with DG DIGIT’s requirements on technology, security, data protection and governance.

Concerning IT security, HaDEA on-boarded two of its main legacy IT systems (47) in the Governance Risk compliance application. The Agency also finalised the security plan for the BTSF Academy and started drafting the security plan for BTSF Contractor. HaDEA conducted regular awareness actions on IT security and compliance monitoring with the support of the central Local Informatics Security Officer.

HaDEA also closed the ColdFusion transformation process, by successfully migrating the only IT system owned by the Agency that was still using this technology (BTSF Contractor).

As far as collaboration and synergies with other executive agencies are concerned, HaDEA reached an agreement with CINEA on cooperation around the WiFi4EU, CEF Telecom and ePad IT tools. Finally, the Agency signed a memorandum of understanding with EISMEA for the shared use of the local data centre and servers, and for the back-up of IT experts related to these.

**Digital empowerment**

At the end of 2022, HaDEA had equipped two large meeting rooms and 14 managers offices with audio-visual equipment for hybrid meetings, provided by DG Interpretation. The Agency provided training for users and first line support. In addition, HaDEA started a pilot project for hybrid meetings using Microsoft Surface Hubs.

HaDEA progressed very well in the migration to the Welcome domain (48). By the end of December, 71% of staff had completed the transition to the new digital environment, putting the Agency on the sixth position out of the 49 Commission services.

**Information management**

In 2022, building on the corporate data governance and policies and with the support of HaDEA’s data agents’ network, HaDEA’s local data correspondent carried out two assessments of the Agency’s data assets.

The 17 data assets identified during the December assessment were included in HaDEA’s inventory, created in April 2022 for the continuous identification and assessment of future data assets. One of the data assets was reported into the Commission’s data catalogue.

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(47) BTSF Academy and BTSF Contractor.

(48) WELCOME is the name of the new digital environment of the Commission that will gradually replace the current environment called NET1.
The HaDEA local data correspondent also organised two meetings with the HaDEA data agents’ network:

- One in May, to endorse the status of implementation of both the corporate data, information, and knowledge management strategy and of the data strategy;
- One in November, to promote the corporate guidance on data quality and the Commission’s data catalogue.

The two meetings were also an important occasion to reflect on how to create a common data culture within HaDEA and on the Agency’s contribution to the implementation of the corporate data governance and policies.

**Data protection**

Throughout 2022, the Agency actively monitored compliance with the Data Protection Regulation (EU) No 2018/1725.

HaDEA took several steps to ensure compliance with data protection rules, including:

- regular awareness-raising and training opportunities for staff, including training for newcomers;
- appropriate information to the data subjects concerned, including on their rights through concise and intelligible data protection notices;
- update of internal procedures and templates to reflect the Agency’s new identity, organisation and legal basis.

HaDEA worked closely together with the European Data Protection Supervisor, the Commission and the other executive agencies to ensure a coherent implementation of its actions in the data protection field.

A new Data Protection Officer was appointed in October 2022.

**Access to documents**

In 2022, HaDEA handled a total of 15 requests for access to documents.

**2.2.3. Sound environmental management**

In 2022, HaDEA continued towards a full integration into the EU Eco-Management and Audit Scheme (EMAS). An EMAS external verification audit took place at the end of May 2022 and its conclusions were very positive.

In May 2022, HaDEA set up a group of EMAS volunteers, with the full support of HaDEA’s Senior management and of DG HR and OIB. The so-called “greening group” met several times during the year and started developing an action plan. The volunteers also joined other Executive Agencies in the preparation of joint actions and communication campaigns. The Green Week in Covent Garden at the end of November and the campaign on 'Digital
Frugality’ which kicked off in early December are good examples of this interagency collaboration.

As a result of the “New Ways of Working” policy, the number of workstations has been reduced to 80% of the total number of staff, thus helping to reduce the Agency’s carbon footprint. HaDEA, along with other Executive Agencies hosted in Covent Garden, joined the BEST action for energy savings, powering down the building twice this year.

Following the communication on the greening of the European Commission in April 2022, and the call for a reduction of carbon emissions from business travel, HaDEA pledged to reduce emissions from travels. The Agency updated internal guidelines to include this new objective and to prepare for the upcoming corporate guidelines on greener missions.

Finally, nearly 8% of HaDEA colleagues took part in Velomai, an interinstitutional cycling challenge taking place during the month of May. HaDEA ranked ninth of all Commission DGs and Executive Agencies in terms of number of rides and was one of the two Executive Agencies in the top 10 services.

2.2.4. Initiatives to improve economy and efficiency of financial and non-financial activities

In 2022, HaDEA launched HaDEAns for Efficiency. This initiative allows staff to submit ideas for process improvement and efficiency gains on different domains through a structured and coherent bottom-up approach. This resulted in several concrete efficiency and improvement actions. Some smaller actions (49) have been implemented whereas others are ongoing and will be finalised in 2023.

In the area of recruitment, the Agency acquired a new tool - Testreach - to carry out written tests. This service provides candidates with an automated and remote organisation of professionally invigilated written tests and is an important improvement in the management of external selections of Temporary Agents. Moreover, HaDEA tested and implemented additional SYSPER2 modules and features, with the aim to manage more efficiently the processes linked to internal mobility, probation, requests to telework from abroad, management of special leaves, management of sick leaves, etc.

As a result of the excellent cooperation between the six executive agencies, the Directors signed a Memorandum of Understanding to establish a clear framework and joint repository for sharing reserve lists stemming from CAST search selections and open calls for expression of interest for Contract Agents. This formal agreement aims to achieve a dynamic working environment, where selection and recruitment activities and inter-institutional mobility function as efficiently and seamlessly as possible.

Moreover, HaDEA continued to participate actively in the interagency working group on the harmonisation of selection processes.

(49) E.g., improvements to the finance procedures and missions’ procedures.
Finally, HaDEA joined forces with the executive agencies and coordinated the very first Interagency Women Talent Programme. Designed as a pilot, this programme intends to create a structured learning opportunity for female staff from the six Executive Agencies who aspire to develop skills for the next steps in their career. This opened the possibility to participants to connect across the agencies and to create a community that could, on the longer term, become an inter-agency women network.