



Annual Activity Report 2024

DG RESEARCH AND INNOVATION

Contents

DG RESEARCH AND INNOVATION (DG RTD) IN BRIEF	3
EXECUTIVE SUMMARY	5
1. KEY RESULTS AND PROGRESS TOWARDS ACHIEVING THE COMMISSION'S GENERAL OBJECTIVES AND SPECIFIC OBJECTIVES OF THE DEPARTMENT ()	15
General objective 1: A EUROPEAN GREEN DEAL	15
General objective 2: A EUROPE FIT FOR THE DIGITAL AGE	20
General objective 3: AN ECONOMY THAT WORKS FOR PEOPLE	24
General objective 4: A STRONGER EUROPE IN THE WORLD	27
General objective 5: PROMOTING OUR EUROPEAN WAY OF LIFE	31
General objective 6: A NEW PUSH FOR EUROPEAN DEMOCRACY	32
General objective 7: A MODERN, HIGH PERFORMING AND SUSTAINABLE EUROPEAN COMMISSION	34
2. INTERNAL CONTROL AND FINANCIAL MANAGEMENT	41
2.1. Control results	42
2.2. Audit observations and recommendations	62
2.3. Assessment of the effectiveness of internal control systems	64
2.4. Conclusions on the assurance	65
2.5. Declaration of Assurance [and reservations]	66
3. MODERNISING THE ADMINISTRATION	67
3.1. Human resource management	68
3.2. Digital transformation and information management	69
3.3. Sound environmental management	71
3.4. Examples of economy and efficiency	72

DG RESEARCH AND INNOVATION (DG RTD) IN BRIEF

The mission of DG Research and Innovation (DG RTD), in collaboration with Member States and international partners, is to design and implement excellent research and innovation policies and programmes that aim to accelerate the transition towards a sustainable, fair and prosperous future for people and the planet with a view to help create growth, jobs and secure the EU technological sovereignty. The **DG aims at the creation of new knowledge and innovation supporting the EU's priorities** in close cooperation with other Commission services with the aim to generate **high scientific, technological and societal impact** built on scientific evidence, relevant input from citizens in an effective, efficient and ethically robust manner. **Commissioner Iliana Ivanova was the Commissioner** in charge of the portfolio of Innovation, Research, Culture, Education and Youth **until 30 November 2024**.

After the European elections in June 2024, **President Ursula von der Leyen** started a second mandate and **Commissioner Ekaterina Zaharieva** was appointed Commissioner for **Startups, Research and Innovation** on 1 December 2024. Her task is to drive the EU's ambition to put research and innovation, science and technology at the centre of our economy. The DG is led by **Director-General Marc Lemaître**.

DG RTD is in a key position to address some of the biggest challenges faced by the European Union: **competitiveness, climate change, biodiversity loss, deep tech innovation, preparedness, long-term social and economic transformations** and responding to **Russia's brutal war of aggression in Ukraine**. It addresses these challenges in a **sustainable, safe, and fair way to ensure a prosperous future for the people and the planet**, based on solidarity and respect for common European values.

In 2024, DG RTD has contributed to the **six headline ambitions of the first mandate of President von der Leyen** and played an important role in making the European Commission a modern, high performing and sustainable place. It has made significant progresses in the implementation of the **Horizon Europe framework programme** and the **Euratom Research and Training programme**. The **European Research Council (ERC)** and the **European Innovation Council (EIC)** have effectively supported the development of fundamental science and deep tech innovation in Europe, while the **EU Missions** and the **European Partnerships** have provided important means to address societal challenges and foster Europe's industrial leadership. DG RTD moved towards a **European Research Area (ERA)** based on a single, borderless market for research, innovation and technology across the EU.

DG RESEARCH & INNOVATION SPECIFIC OBJECTIVES TO THE COMMISSION'S HEADLINE AMBITIONS ⁽¹⁾

GENERAL OBJECTIVE 1: A EUROPEAN GREEN DEAL

- ◇ **Specific objective 1.1:** High-quality science, knowledge and innovative solutions support climate policies and help to preserve biodiversity, ecosystem and natural resources
- ◇ **Specific objective 1.2:** Mainstreaming of the public and private research and innovation investments for climate actions strengthens the European Green Deal's impact
- ◇ **Specific objective 1.3:** Co-creation of Horizon Europe and its missions and partnerships increases awareness of the key role of research and innovation for achieving climate neutrality

GENERAL OBJECTIVE 2: A EUROPE FIT FOR THE DIGITAL AGE

- ◇ **Specific objective 2.1:** High-quality science, knowledge and innovative solutions facilitate a digital transition in Europe, including a new European approach to Artificial Intelligence
- ◇ **Specific objective 2.2:** The revitalised European Research Area sets directions for societal, economic and ecological transitions in Europe and contributes to spreading excellence, closing research and innovation gap and working out a common global response to emerging challenges
- ◇ **Specific objective 2.3:** Research and innovation actions and the European Innovation Council in particular support development and scaling-up of SMEs with breakthrough and disruptive technologies

GENERAL OBJECTIVE 3: AN ECONOMY THAT WORKS FOR PEOPLE

- ◇ **Specific objective 3.1:** Research and innovation actions, increased R&I investments and the R&I component of the European Semester boost economic growth and jobs creation

GENERAL OBJECTIVE 4: A STRONGER EUROPE IN THE WORLD

- ◇ **Specific objective 4.1:** Regional research and innovation strategies and broader association policy contribute to promoting common European R&I values and creating a global Research and Innovation Space

GENERAL OBJECTIVE 5: PROMOTING OUR EUROPEAN WAY OF LIFE

- ◇ **Specific objective 5.1:** Research and innovation develop and deploy solutions, technologies and innovations to tackle emerging threats and improve crisis preparedness
- ◇ **Specific objective 5.2:** Research and innovation support the European health initiatives, including the European plan to fight cancer

GENERAL OBJECTIVE 6: A NEW PUSH FOR EUROPEAN DEMOCRACY

- ◇ **Specific objective 6.1:** European research and innovation support citizens' involvement, social inclusion and equalities in Europe, including through communication of the European R&I added value

GENERAL OBJECTIVE 7: A MODERN, HIGH PERFORMING AND SUSTAINABLE EUROPEAN COMMISSION

- ◇ **Specific objective 7.1:** The Common Implementation Centre and the Policy and Programming Centre provide user-friendly services and tools to the European Commission for effective and efficient planning, programming and implementation of the Research and Innovation Framework Programme and other EU programmes

⁽¹⁾ The general and specific objectives are defined in the Strategic Plan 2020-2024

EXECUTIVE SUMMARY

This annual activity report is a management report of the Director-General of DG Research and Innovation (DG RTD) 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 ⁽²⁾.

⁽²⁾ Article 17(1) of the Treaty on European Union.

A. Key results and progress towards achieving the Commission's general objectives and department's specific objectives

In 2024, DG RTD contributed to **the six General Objectives of the Commission** (plus the objective **“A Modern, High Performing and Sustainable European Commission”**) with a focus on **accelerating the green and the digital transition**, leveraging its analytical ability, with dedicated strategic reports, foresight and economic analysis, as well as deploying budgetary and political tools at its disposal.

A key milestone marking the end of the implementation of the first ERA Policy Agenda was the adoption in 2024 of **the Communication entitled “The implementation of the European Research Area. Strengthening Europe's Research and Innovation: The ERA's Journey and Future Directions.”** Four years after the adoption of the Communication on “A new ERA for research and innovation”, the 2024 Communication takes stock of advances since 2020, identifying successes, shortcomings and areas in which further action is still required to achieve the ERA's objectives.

The works around the **next ERA Policy Agenda 2025-2027** advanced very well during 2024, with important input towards the definition of the next Agenda received from a diversity of stakeholders. Work on preparing the strategy on AI in science and the formation of the AI Research Council has started, aligning with goals of economic competitiveness, resilience, sustainability, digitalization, and technological sovereignty. The DG published **Guidelines on the use of generative AI in science** in the framework of the new European approach to **Artificial Intelligence (AI)**, in collaboration with Member States and relevant stakeholders.

In 2024 a main success was **the Strategic Energy Technology Plan** a structural policy under ERA. Furthermore, and in line with the European Commission's REPowerEU Plan which seeks to double the number of **Hydrogen Valleys** in the EU by 2025, the Commission published the staff working document (SWD) **“Towards a roadmap for accelerating the deployment of Hydrogen Valleys across Europe: challenges and opportunities”**, which outlines strategic priorities and actions, including the Hydrogen Academy.

DG RTD worked under the headline ambition **“An economy that works for people”** towards boosting economic growth and job creation. Cross-cutting initiatives such as the **Communication on Advanced Materials for Industrial Leadership** has kicked off concrete actions to establish a strong RTD ecosystem on advanced materials in Europe. The **EIC Work Programme 2025** proposed a more selective approach on priorities and deep tech focus along with SMEs and scale up opportunities, including a **pilot** scale up call for the **EIC Strategic Technologies for Europe Platform (STEP)**. By 2024, as the first comprehensive report on the **New European Innovation Agenda (NEIA)'s implementation** states, DG RTD completed 17 out of 25 actions of the agenda, with over 200 excellent innovative initiatives.

The Commission presented the annual update of **Research & Development (R&D) investments** of companies worldwide in the **EU Industrial R&D Investment Scoreboard**, as the result of a cooperation of DG RTD and the JRC.

DG RTD has also kept contributing to the successful implementation of the **RTD-related investments and reforms in Recovery and Resilience Plans (RRPs) of the Recovery and Resilience Facility**. The DG analysed and discussed the RTD investments and reforms of the milestones and targets agreed in Recovery and Resilience Plans, worth overall EUR 57 million.

The **Council Recommendation on enhancing research security** was adopted in May 2024 on the basis of the Commission proposal put forward in January. DG RTD further implemented measures to foster **the European Economic Security Strategy** in line with **the EU's Global Approach** to RTD. The DG kept international cooperation in RTD open and safe with targeted international actions, continued multilateral cooperation and exploratory talks, negotiations as well as **signature of association agreements**.

DG RTD continued actively supporting **Ukraine's RTD system and its actors**, including by providing training and support to its nuclear facilities and researchers by dedicated measures in support of Ukraine's industry and technology infrastructure.

The **COVID-19 pandemic** highlighted the importance to increase the preparedness to emerging threats. In the area of health research, it brought up the need for **large-scale multi-centre clinical trials**. DG RTD enabled the set-up of **European platform trials** for COVID-19 therapeutics and vaccines and moved towards **further strengthen and consolidate the clinical research ecosystem** with platform trials for preparedness for future epidemics or pandemics.

Efforts continued to move forward **the digital transformation of health and care** and to pursue the implementation of **the Cancer Mission**.

DG RTD continues to work on the update of the EU Bioeconomy Strategy in cooperation with DG ENV. It was announced in the 2024 **Commission Communication "Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU"** and represents a series of targeted actions to boost biotechnology and biomanufacturing in the EU. The Communication on Building the future with nature identifies the challenges and barriers, and proposes to tackle them, in line with the **Communication on the long-term competitiveness of the EU**.

In the context of **deepening science-society relations**, DG RTD expanded and reinforced the European Citizen Science community. A **Mutual Learning Exercise (MLE)** under the ERA Policy Agenda's Action on **Public Engagement in RTD** started in 2024, with four thematic sessions held across the year to identify challenges and opportunities at the national

level. Among activities towards social inclusion and equality in Europe, DG RTD worked with a special focus on the **Gender Equality** activities in both Horizon Europe and the ERA.

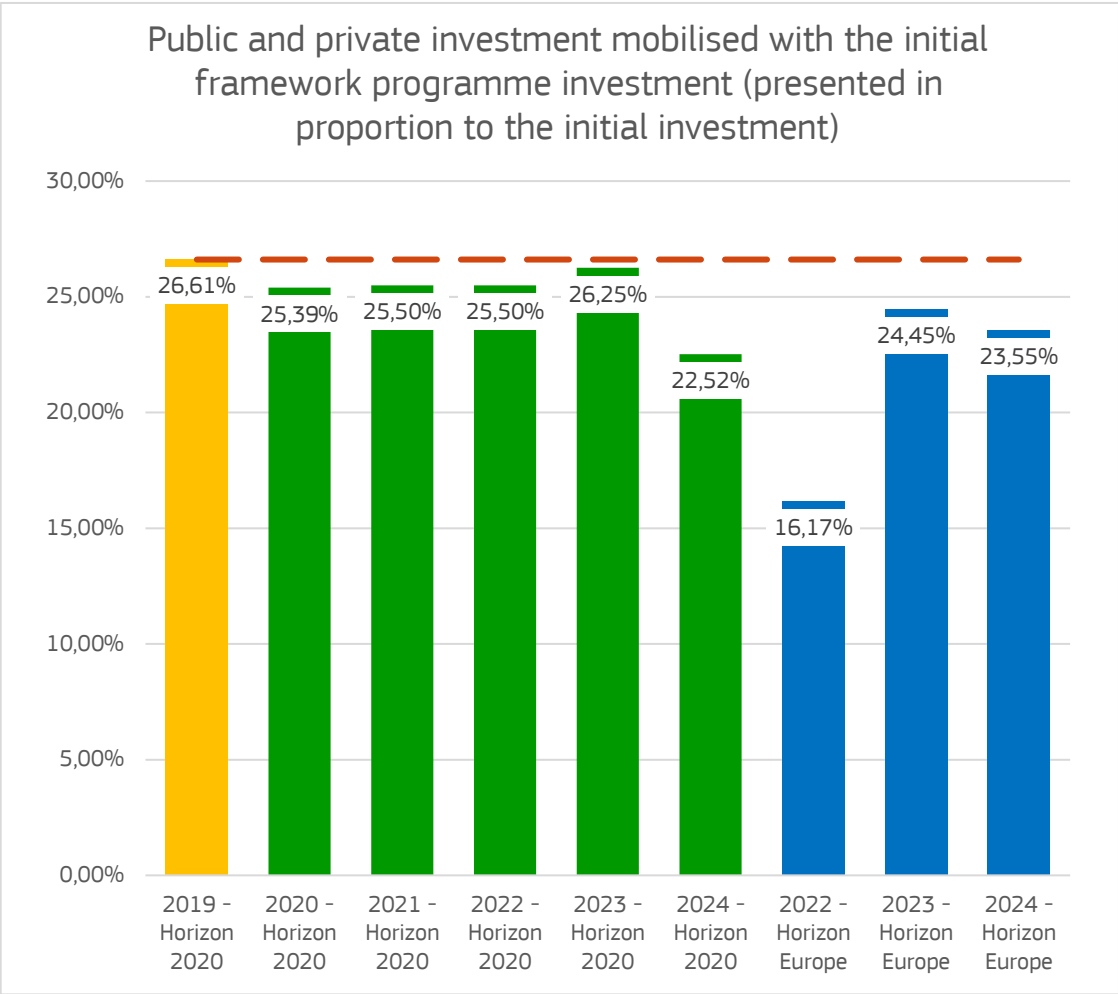
DG RTD made sure that **the implementation of Horizon Europe and the Euratom programme** run smoothly and contributed to delivering on EU priorities. The DG puts a particular focus on enhancing **synergies within Horizon Europe and with other programmes and instruments** at EU, national and regional level, notably cohesion policy instruments and the Recovery and Resilience Facility.

In 2024, a series of reports were published and have started to influence the strategies of the European Commission and DG RTD: the **Draghi report** on the “Future of European Competitiveness”, **Enrico Letta’s analysis** of the future of the single market and the **European Commission’s report on the evolution of competition in the EU over the past 25 years**. These reports, particularly the Draghi Report, will shape the decisions and priorities of the Commission and DG RTD. In October 2024, the group led by Manuel Heitor issued the report **“Align, Act, Accelerate: Research, Technology and Innovation to boost European Competitiveness”** which provides the experts views on how to strengthen Horizon Europe, the EU research and its successor.

In her 2023 State of the Union address, President von der Leyen reiterated the importance of the political commitment **to rationalise reporting requirements and reduce them by 25%**, without undermining the related policy objectives. DG RTD is working on a series of actions to achieve that objective including **the revision of the reporting templates** to reduce the administrative burden, **the increased use of lump sum funding** aiming at 50% of the total call budget by 2027 and also, since May 2024, the introduction of **the optional unit costs for personnel**.

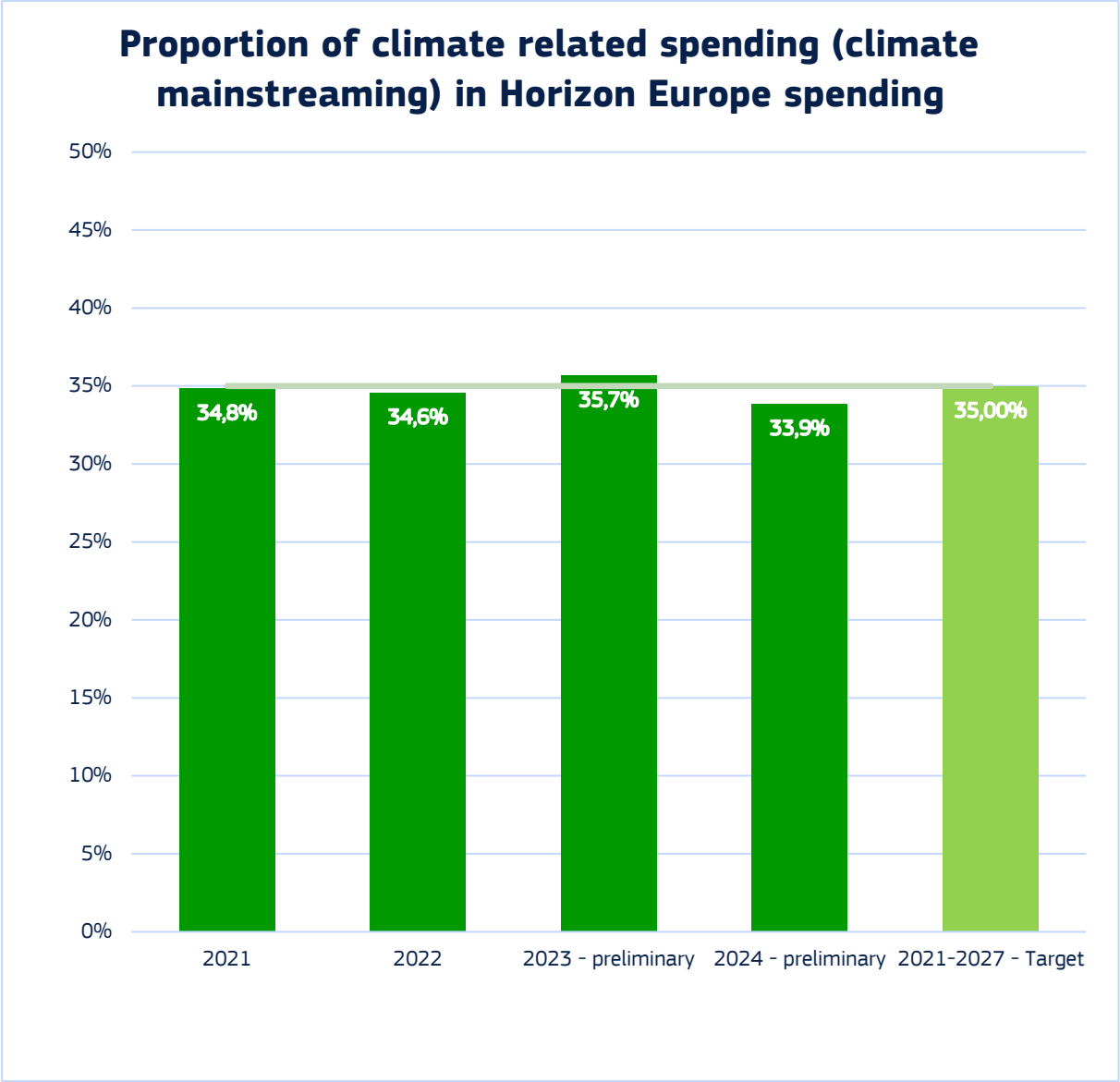
B. Key performance indicators

1. Public and private investment mobilised with the initial framework programme investment (presented in proportion to the initial investment) - (Result indicator 8 in the performance tables - specific objective 2.1 – indicator revised due to the new methodology)*



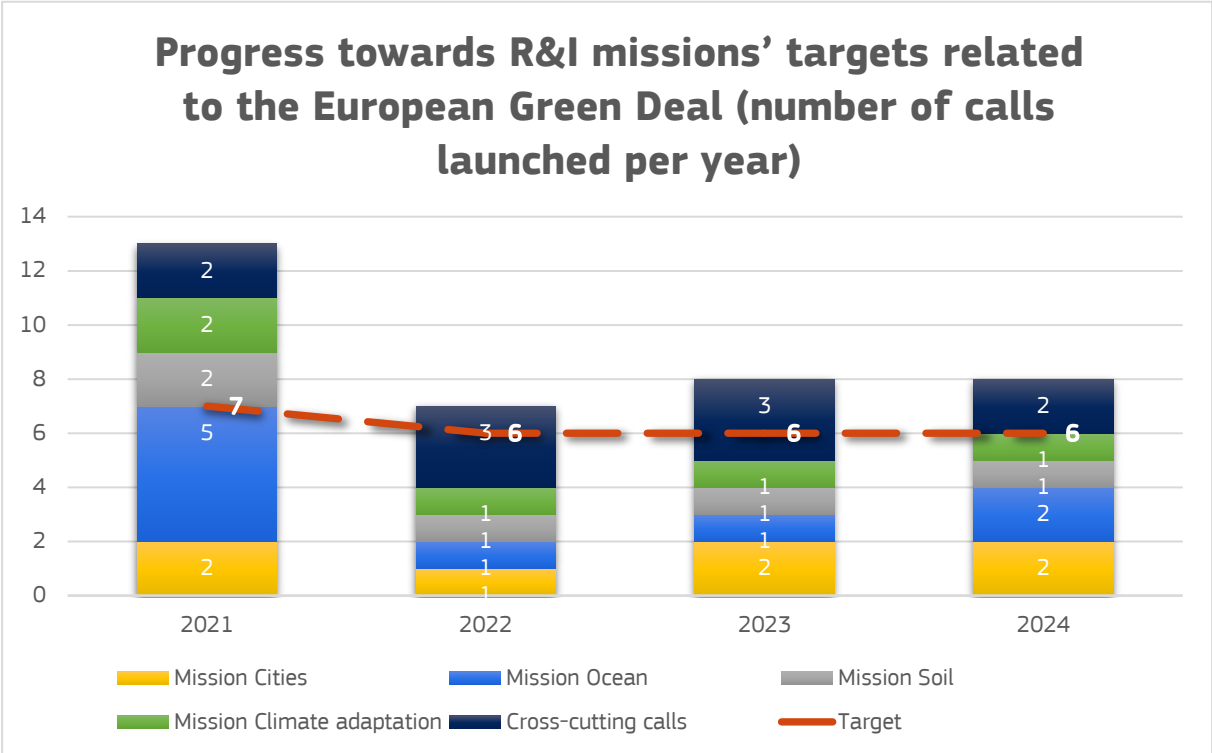
*The values have been recalculated in 2024, presenting the percentages disaggregated by programme with the latest methodological update. It is important to take into account that the implementation of Horizon 2020 was in its closing phase, while the implementation of Horizon Europe is currently ramping up. Except for 2022, the Horizon Europe values are close to the values shown for Horizon 2020 over the years. The decrease in 2024 should be corrected in the future once all the reporting values will be available. Additionally, it is important to consider the factors that influence the ratio public & private investment against the total EU investments: This ratio can vary over the years depending on the actions and call types, the beneficiaries' financial capabilities and the implementation stage of the programme.

2. Proportion of climate related spending (climate mainstreaming) in Horizon Europe spending (Result indicator 3 in the performance tables - specific objective 1.2)*



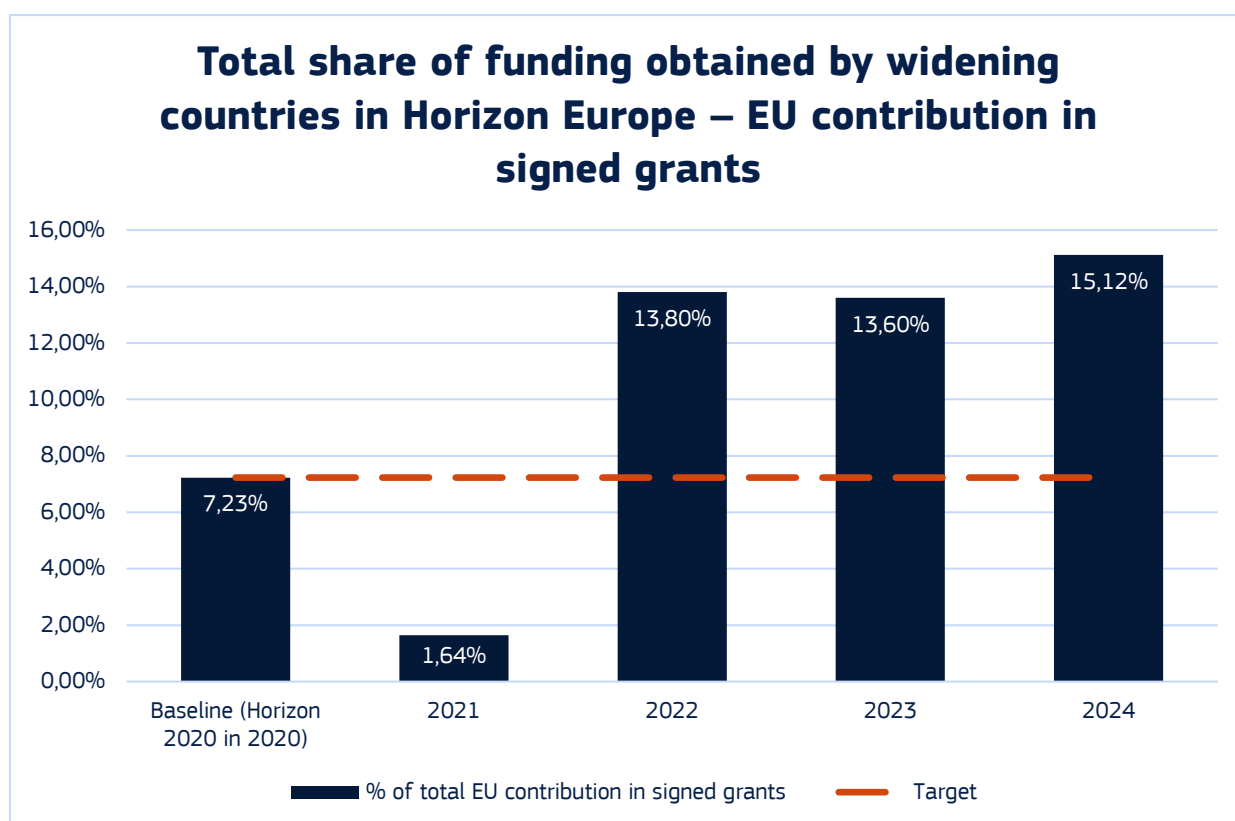
* The Horizon Europe regulation states that “actions under this Programme shall contribute at least 35 % of the expenditure to climate objectives where appropriate”. This underscores the programme’s commitment to addressing climate change and advancing sustainability goals. Based on the amounts related to climate for the implementation period 2021 to 2024, and in light of the estimates for 2025 to 2027, the overall contribution of Horizon Europe to climate is estimated to be at 35,6%. However, this percentage is contingent upon several factors: firstly, it relies on the confirmation of data for the years 2023 and 2024, which may fluctuate due to the nature of some funded activities. Secondly, this percentage is also dependent on the estimates made, which are based on the objective of achieving a 35% contribution. If this objective is maintained in the programming, it can be expected to sustain this percentage moving forward.

3. Progress towards RTD missions' targets related to the European Green Deal (Result indicator 5 in the performance tables - specific objective 1.3)*



*The chart above shows on stacked columns the total number of calls and cross-cutting calls related to the Green Deal from the EU Missions (Adaptation to Climate Change, Restore our Ocean and Waters by 2030, 100 Climate-Neutral and Smart Cities by 2030, a Soil for Europe) for 2021, 2022, 2023, and 2024. The calls are counted taking into account the year of the closing of the calls. The target for this indicator is having at least 6 calls related to the Green Deal per year, one call per mission and an additional cross-cutting call per year, with the exclusion of 2021 when the target was 7 calls. As it is shown, the indicator has been regularly above target.

4. Total share of funding obtained by widening countries in Horizon Europe – EU contribution in signed grants (Result indicator 10 in the performance tables - specific objective 2.2)*



*The baseline is based on Horizon 2020 average funding for the all period of the framework programme. The targets for Horizon Europe are based on higher values than the baseline for Horizon 2020 (7.23%).

5. Risk at payment and at closure for Horizon 2020 and Horizon Europe grants (see section 2 internal control and financial management)

Estimated Risk at payment/closure	
<p>Target for Horizon 2020 Risk at payment and at closure should be close to 2%</p>	<p>Results - Estimated risk at payment for the Horizon 2020 Framework Programme: 3.55% - Estimated risk at closure for the Horizon 2020 Framework Programme: 1.79% (1.99 % for DG Research and Innovation).</p>
<p>Target for Horizon Europe Risk at payment and at closure should be below 2%</p>	<p>No representative error rate for Horizon Europe is available in 2024 as the ex-post audit campaign for the Programme was launched in the second half of 2024.</p>

C. Key conclusions on internal control and financial management

DG RTD has systematically examined the available control results and indicators, including those from supervised entities to which it has entrusted budget implementation tasks, 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 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 IT security risk management and the Horizon Europe Control Strategy, and more specifically the design of the overarching control strategy and the design of the ex-post controls. The Director-General, in his capacity as Authorising Officer by Delegation, has signed the Declaration of Assurance.

D. Provision of information to the Commissioner(s)

In the context of the regular meetings during the year between the DG RTD and the Commissioner(s) on management matters, the main elements of this report and assurance declaration, have been brought to the attention of Commissioner I. Ivanova, responsible for Innovation, Research, Culture, Education and Youth, and Commissioner E. Zaharieva, responsible for Startups, Research and Innovation.

1. KEY RESULTS AND PROGRESS TOWARDS ACHIEVING THE COMMISSION'S GENERAL OBJECTIVES AND SPECIFIC OBJECTIVES OF THE DEPARTMENT ⁽³⁾

General objective 1: A EUROPEAN GREEN DEAL

The three following specific objectives, with relevant results indicators reflected in the annex (performance table, page 9 in the annexes), cover the broad spectrum of Research & Innovation activities contributing to the 'European Green Deal'.

Specific objective 1.1: High-quality science, knowledge and innovative solutions support climate policies and help to preserve biodiversity, ecosystem and natural resources

In 2024, DG RTD continued its work on the **European Green Deal**, addressing **climate change** and environmental degradation to achieve the EU's mid- and long-term climate and environmental targets. DG RTD continued to contribute to climate science, climate mitigation, adaptation and resilience, biodiversity, nature-based solutions and environmental observations.

Following the 2023 Council's conclusions on bioeconomy, the Commission further integrated bioeconomy into all policies in 2024. In line with the Mission Letters of **Commissioners Zaharieva** and Roswall, DG ENV and DG RTD are cooperating closely on updating the **EU Bioeconomy Strategy** by end 2025. The updated EU Bioeconomy Strategy was announced in the 2024 **Commission Communication "Building the future with nature: Boosting Biotechnology and Biomanufacturing in the EU"** presenting actions, among others, aimed at deepening cooperation with international partners on biotechnology research under the Science and Technology Agreements, at implementing the EU Biotech Hub and at fostering health biotechnology.



In the **2023-2024 Horizon Europe Work Programme**, an additional EUR 58 million were allocated to six **Circular Cities and Regions Initiative (CCRI)** projects ⁽⁴⁾, for a total of EUR 140 million. In addition, the **CCRI** has strengthened collaboration with associated initiatives and strategic partners (European Investment Bank and Organisation for Economic Co-operation and Development) and supported 140 cities and regions, involving almost 300 organisations, with its **knowledge hub** and the launch of a self-assessment tool. DG RTD

⁽³⁾ An Executive Agency uses as heading: "Implementation of the Agency's Annual Work programme - Highlights of the year".

⁽⁴⁾ CCRI Projects | Circular Cities and Regions Initiative: [https://circular-cities-and-regions.ec.europa.eu/ccri-projects?f%5B1%5D=type of action%3A98&f%5B2%5D=type of action%3A97](https://circular-cities-and-regions.ec.europa.eu/ccri-projects?f%5B1%5D=type%20of%20action%3A98&f%5B2%5D=type%20of%20action%3A97)

has also contributed to the **circular economy transition** with the **Circular Bio-based Europe Joint Undertaking (CBE JU)**.

The Communication on the revised **Strategic Energy Technology (SET) Plan** of October 2023 was followed up, aiming at the simplification of the governance structure to address alignment and defragmentation issues identified by **the Draghi report**. Following the formal adoption of the **Net-Zero Industry Act**, the SET Plan Steering group became an expert group in the **frame of the European Research Area (ERA)**, and the SET Plan a structural policy under ERA. To implement the '**ERA pilot on Green Hydrogen**' DG RTD has established a Temporary Working Group, which will evolve in 2025 to a new **Implementing Working Group on Hydrogen under the SET Plan**.

The 2024 **Staff Working Document “Solar energy joint research and innovation agenda with Member States in the context of the European Research Area”** builds on the work done in the context of the SET Plan in the Implementing Working Groups on Solar Photovoltaics and on Solar Thermal to advance key technologies by 2030, streamline RTD efforts of the EU and Member States, identify crosscutting issues and address the solar energy sector.

To unlock the full potential of **offshore renewable energy** and implement the **European Wind Power Package**, DG RTD has launched in 2024 a portfolio of projects **on advanced materials** for magnets, with special attention to permanent magnets in wind-turbine engines.

The European Group on Ethics in Science and New Technologies (EGE) worked on three connected opinions related to **planetary ethics** and the green transition. These opinions are expected **to inform the agenda-setting of the Commission**. The first opinion addressed specific ethical questions related to solar radiation modification and, broadly, the ethics of environmental engineering. The second analysed concepts around the value of nature and the meaningfulness of attempts to value nature and human actions with effects on nature in economic terms. The third explored aspects of social, global, inter-generational justice in the context of the green transition.

To highlight the links between ethics, health and the green transition, the high-level conference **“Research Perspectives on the Health Impacts of Climate Change”** was organised in 2024 and, following it, DG RTD is now working on a strategic RTD agenda on health and climate change (SRIA). DG RTD also funded under a call on **environmentally sustainable and climate neutral healthcare systems** a pre-commercial procurement call for environmentally sustainable, climate neutral and circular health and care systems with a budget of EUR 15 million.

In 2024, DG RTD verified that the process for ex-ante estimations of the **expenditure committed to policy priorities, notably climate (binding 35% target)**, proved to be reliable.

Specific objective 1.2: Mainstreaming of public and private research and innovation investments for climate actions strengthens the European Green Deal's impact

DG RTD worked towards strengthening climate actions and led the EU delegation in the **Intergovernmental Panel on Climate Change** (IPCC), the **Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services** (IPBES), and the **United Nations Framework Convention on Climate Change's** (UNFCCC) COP-29. The DG worked to progress science-policy interface processes on climate and biodiversity issues.

DG RTD contributions to climate actions are key for specifying the competitive advantage that investments in making our society nature resilient and nature positive could bring. In 2024, the **EU Mission on Adaptation to Climate Change** progressed significantly towards its objectives and proved to be a key vehicle to demonstrate the transformative power of RTD towards climate resilience and to show that accelerating the progress on climate resilience is possible. The increased usage and deployment of RTD solutions on the ground through the EU Mission is an indicator of the increased momentum and investments on adaptation to climate change.

In line with the European Commission's REPowerEU Plan which seeks to double the number of **Hydrogen Valleys** in the EU by 2025, the Commission published the staff working document (SWD) **“Towards a roadmap for accelerating the deployment of Hydrogen Valleys across Europe: challenges and opportunities”**.



The total amount of Hydrogen Valleys has the potential to produce almost half of the REPowerEU target for domestic production of hydrogen in the EU of 10 million tons and this SWD therefore presents a big milestone in reaching the hydrogen targets of the European Commission.

In relation to the **Euratom Research and Training Programme**, the actions launched and managed in 2024 by DG RTD enabled Member States to collaborate in harnessing the opportunities presented by nuclear technologies while mitigating risks. This knowledge is indispensable for Member States opting to include nuclear energy in their energy mix, as well as for those seeking assurance that nuclear reactors' energy, whether domestic or imported, adhere to the highest safety standards.

DG RTD launched the **public consultation on the interim evaluation of the Euratom Programme 2021-2025** in early 2024. The results of this interim evaluation will feed into the planned extension of the Euratom Programme for 2026-2027 and the next Euratom Programme 2028-2032. Additionally, the **ex-post evaluation of the Euratom Research and Training Programme 2014-2020** was published in November 2024. It analyses the rationale, implementation and achievements of the Euratom programme, as well as the

longer-term impacts and sustainability of measures taken as part of the programme, to inform the preparation and design of future Euratom programmes.

In relation to nuclear energy, DG RTD initiated 21 projects, including 2 new partnerships on **radioactive waste management** (EURAD-II) and **nuclear materials** (CONNECT-NM), and nine projects addressing the safety of existing and future nuclear power plants, including **Small Modular Reactors** with a total Euratom funding allocation of EUR 121 million. In 2024, DG RTD has also finalized the amendment to the current Euratom work programme to include the **European Nuclear Skills Initiative**, a **European Fusion Industry Platform** and the preparations for a Public-Private Partnership on Fusion Energy.

DG RTD, in collaboration with other DGs, has supported a series of deployment actions for RTD results for **the decarbonisation of energy-intensive industries**, through European Partnerships such as Processes4Planet, Clean Steel or Made in Europe. The Research Fund for Coal and Steel continued funding support for the green transition of the steel sector as well as a support from regions in transition from coal. The Commission implementing decision on the financing of the Research Programme of the Research Fund for Coal and Steel (RFCS) and the adoption of the work programme for 2025 allowed the opening of the Big Tickets calls for steel in 2025.

The work carried out to design a 'safe and sustainable by design' (SSbD) toolbox for chemicals and materials by the Partnership for the Assessment of Risks from Chemicals (PARC) and the continuous stakeholder dialogue and the second workshop to refine the SSbD framework provided significant contributions to the European Green Deal's sustainability goals. In close collaboration with JRC, the Methodological Guidance for implementing the framework has been published. Furthermore, advancing circular technologies was included in the future ERA Policy Agenda 2025-27 action on 'Accelerating RTD investments for Europe's Industrial Transformation and Competitive Sustainability', planned for adoption in 2025.

The new co-funded **Horizon Europe partnership on Sustainable Food Systems**, FutureFoodS brings together 84 partners from 29 countries with a total indicative budget of EUR 525 million over the next 10 years. The mission of FutureFoodS is to accelerate the transformation of food systems in line with the European Green Deal objectives and to contribute to the RTD policy framework Food 2030. The first co-funded call for transnational research projects, with an overall budget of EUR 40 million, has been launched in November.

Specific objective 1.3: Co-creation of Horizon Europe and its missions and partnerships increases awareness of the key role of research and innovation for achieving climate neutrality

DG RTD continued its implementation efforts, including co-creation processes, for **the 5 EU**



Missions and **Horizon Europe partnerships** throughout 2024. The **mission-oriented innovation** approach has clearly proven its value with several countries implementing it in their R&I programmes. They are distinct from other R&I instruments as they have time-bound and specific goals and are not prescriptive of how to achieve success. However, as indicated by the Communication “EU

Missions two years on: assessment of progress and way forward”, the EU Missions have faced implementation shortcomings. The Commission is working to enhance the performance of the EU Missions in these areas, which will require further political support to reach their 2030 goals.

The **EU Mission ‘A Soil Deal for Europe’** launched its first 25 Living Labs, presenting them during the second **European Mission Soil Week** in November 2024 together with the announcement of the **Mission Soil Ambassadors’ show**. Fifty projects are now advancing soil-related research and innovation.

The **Mission Oceans and Water** has continued to mobilise and structure activities in 2024. The projects selected for funding are implemented in 223 demonstration sites across Europe. Further mobilisation activities have taken place in the context of the different **Mission Lighthouses**. The pilot scheme **‘EU Blue Champions’** was launched in collaboration with the European Investment Bank (EIB) and supported by the BlueInvest platform.

In 2024, 43 **Mission Labels** were awarded to participating cities in **the EU Mission for Climate-Neutral and Smart Cities**, bringing the total of awarded Mission Labels to 53. The Label recognizes the cities' plans to achieve **climate-neutrality by 2030** and aims to facilitate access to public and private funding. DG RTD is in the process of reviewing the next batch of received **Climate City Contracts**.

In a forward-looking view, DG RTD consulted stakeholders in on several forthcoming planning and programming activities. The **European Partnerships Coordination Group**, reuniting the DG along with all DGs and relevant Executive Agencies, was involved in the design, policy steer, and implementation of all types of partnerships. The **EU Partnership Stakeholder Forum** (4-5 December 2024) gathered more than 400 participants to focus on the future of EU Partnerships. In the **Partnership Knowledge Hub** the Commission, Member States and Associated Countries, as well as partnership representatives, prepared a Mutual Learning Exercise on the impact of partnerships on national R&I systems.

General objective 2: A EUROPE FIT FOR THE DIGITAL AGE

The three following specific objectives, with relevant results indicators reflected in the annex (performance table, page 11 in the annexes), cover the broad spectrum of RTD activities contributing to the ‘Europe fit for the Digital Age’.

Specific objective 2.1: High-quality science, knowledge and innovative solutions facilitate a digital transition in Europe, including a new European approach to Artificial Intelligence

The digital transition opens up new avenues for performing research and innovation activities. DG RTD leveraged cloud computing, earth observations and artificial intelligence in 2024 to foster cutting-edge science. DG RTD pursued the establishment of **the Cultural Heritage Cloud** and oversaw a growing Cloud user community, now totalling over 4 000 cultural heritage professionals and researchers.

The core infrastructure and the first phase of **the Digital Twin Ocean, EDITO**, has been unveiled for the public at the Digital Ocean Forum in June 2024. The preparation for the second phase of the DTO is ongoing. The EDITO aims to create a digital version of the ocean allowing researchers and entrepreneurs to generate new knowledge and innovative solution linked to marine ecosystems. In the area of **earth observations (EO)**, the multi-state Group on Earth Observations (GEO) is developing the Global Ecosystems Atlas project and working on implementing EO-based intelligence on the basis of the post-2025 strategy **“Earth Intelligence 4 all”**.



Regarding the new European approach to Artificial Intelligence, the **Guidelines on the use of generative AI in science** were published in 2024 in collaboration with Member States and relevant stakeholders through the European Research Area Forum ⁽⁵⁾, to support the European research community in their responsible use of generative AI and research integrity.

In 2024, DG RTD published a staff working document entitled **“Status of progress on Connected, Cooperative and Automated Mobility”**, taking stock and highlighting achievements on the development and deployment of connected, cooperative and automated mobility ⁽⁶⁾.

⁽⁵⁾https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/guidelines-responsible-use-generative-ai-research-developed-european-research-area-forum-2024-03-20_en

⁽⁶⁾ Staff working document following the 2018 Commission Communication “On the road to automated mobility: An EU strategy for mobility of the future” [EUR-Lex - 52018DC0283 - EN - EUR-Lex](#)

Specific objective 2.2: The revitalised European Research Area sets directions for societal, economic and ecological transitions in Europe and contributes to spreading excellence, closing research and innovation gap and working out a common global response to emerging challenges

The works around the **next European Research Area (ERA) Policy Agenda 2025-2027** advanced during the whole 2024, with important inputs on the definition of the next Agenda received from diverse stakeholders. At the same time, DG RTD proceeded with the implementation of the **ERA Policy Agenda 2022-2024** in close collaboration with Member States, Associated Countries, and stakeholders through the **ERA Forum** and the **European Research Area and Innovation Committee (ERAC)**.



The **ERA Policy Platform**, an essential component of the **ERA monitoring mechanism**, was launched in the first half of 2024. Its different resources can now be used, enabling a better overview of major achievements and remaining gaps in the implementation, thus allowing DG

RTD, member states and stakeholders to prioritise their efforts. The Commission Communication **“The implementation of the European Research Area. Strengthening Europe's Research and Innovation: The ERA's Journey and Future Directions.”** was adopted in October 2024. It took stock of advances, identifying successes, shortcomings and areas in which further action is required.

DG RTD's **widening policy** contributed to economic and social cohesion in the EU by addressing the innovation divide. The widening instruments have shown a significant uptake: the twinning networking action received a record-breaking 800+ proposals, resulting in 96 grant agreements signed in the first half of 2024. **The Excellence Hubs initiative** saw over 200 submissions - more than double the number received in the first call. Additionally, the **Circular Bio-based Europe Joint Undertaking (CBE JU)** has adopted a dedicated **Widening Strategy and Action Plan**.

In 2024, DG RTD made further progress on the **EU Open Science policy**, improving the accessibility and reusability of research data and publications across Europe. Open science is essential in fostering a culture of openness and collaboration among researchers and institutions to support the development of key infrastructures and policy frameworks. The development of **the European Open Science Cloud (EOSC) EU node** started in February 2024 and was officially launched by **Commissioner Ivanova** in the EOSC Symposium in October 2024.

Aiming at an **EU framework for copyright and data fit for research**, DG RTD published a study on enhancing access to, and reuse of, publicly funded research results as well as

publications and data for scientific purposes, gathering Member States and stakeholder groups support on legislative and non-legislative measures.

DG RTD revised the **Charter for Access to Research Infrastructures** and was involved in the analysis of the European landscape of research infrastructures by the **European Strategy Forum on Research Infrastructure**, published in June 2024. The renewed long-term strategy to boost **European research infrastructures** saw consultations with Member States and with the research infrastructures community, with the idea of extending the strategy to technology infrastructures. In parallel, DG RTD has pursued comprehensive evidence gathering on **Technology Infrastructures**, producing two studies detailing and mapping European, national, and regional initiatives, strategies and programmes addressing investments in Technology Infrastructures and clean and renewable energy technologies. Analysis of access modalities, conditions and barriers for industry, in particular SMEs and start-ups, in relation to the use of Technology Infrastructure services has been conducted. Based on this work, the Commission is developing **a long-term strategy to boost European Research Infrastructure**.

On supporting research careers, DG RTD oversaw a **Mutual Learning Exercise on research careers** between 16 participating Member States, aided by the **Horizon Europe Policy Support Facility**. The Commission signed a Contribution Agreement with the Organisation for Economic Cooperation and Development for the implementation of the **Research and Innovation Careers Observatory (ReICO)**. A new **call on talent ecosystems focusing on early-stage researchers** was launched within the Widening Participation and Spreading Excellence actions (WIDERA) part of the Horizon Europe work programme 2023-2024 with 49 proposals received. At the end of 2024, **RESAVER**, supporting researchers to preserve their pension benefits when moving, was operational in 8 countries, with France's addition during the year.

DG RTD worked on a self-assessment tool for researchers based on the **European Competence Framework for Researchers (ResearchComp)**. Under the **Agreement on Reforming Research Assessment**, DG RTD published the related **Action Plan**. As member of the **Coalition for Advancing Research Assessment (CoARA)**, DG RTD contributed to the Working Group for improving the practices in the assessment of proposals. Around 150 additional organisations have signed the Agreement on Reforming Research Assessment in 2024, bringing the total number of signatories to 805 organisations from 57 countries, including 15 outside of Europe. As of November 2024, CoARA counts 706 members.

Lastly, in 2024, DG RTD fostered **feedback to policy (F2P)** touching topics spanning transnational access and on addressing synergies between research and technology infrastructures, biotechnology and biomanufacturing, inequalities and disabilities research. **ERA feedback-to-policy plan** saw initial content published on eight ERA policy areas. Around the **reform of research assessment practices**, DG RTD published the contributions of projects funded by Horizon 2020 and Horizon Europe. Projects from **European Innovation Ecosystem** 2023 work programme have been monitored to inform and help policy making.

Specific objective 2.3: Research and innovation actions and the European Innovation Council in particular support development and scaling-up of SMEs with breakthrough and disruptive technologies

In 2024, the Commission adopted the first comprehensive report on the **New European Innovation Agenda (NEIA)'s implementation**. By 2024, the New European Innovation Agenda completed 17 actions. In the frame of NEIA, DG RTD published the findings of the **Innovation-Friendly Regulations Advisory Group (IFRAG)** on public sector regulations that may be impacted by emerging virtual worlds technologies.

By 2024, the New European Innovation Agenda completed 17 actions. Substantial progress was made with the **Regional Innovation Valleys (RIVs)** initiative: In 2024 the first **148 regions** have received the Regional Innovation Valleys label and, with nearly EUR 54 million, 5 interregional and cross-border consortia have begun implementing the European Innovation Ecosystems Work Programme. Further supported by the **European Innovation Ecosystems**, DG RTD has seen increased submission rate for actions under the Agenda, particularly for the Startup Europe, the Expanding Academia-Industry Collaboration and Women TechEU actions.

The **EU Catalyst partnership** has successfully completed its third demonstrator project, which involves multi source industrial heat storage system designed to aid in the decarbonisation of industrial processes. This innovative project will be implemented across three sites in Denmark, Germany, and Portugal.

DG RTD continued to establish a **structured dialogue with the European Investment Bank (EIB)** in 2024 with the aim to identify funding opportunities for promising innovative companies deploying technologies resulting from Horizon Europe funded projects.

Despite the transition of the European Innovation Council (EIC) to indirect management at the end of 2023, the **EIC Work Programme 2025** was timely adopted, proposing a more selective approach on priorities and deep tech focus along with SMEs and

scale up opportunities. The work programme included a **Pilot scaleup call of the EIC Strategic Technologies for Europe Platform (STEP)**. This funding will aim to catalyse major funding rounds, with total investment rounds ranging from EUR 50 million to EUR 150 million, at least 3 to 5 times the EIC investment, potentially achieving significant global impact.

By end of 2024, the **EIC Fund** has maintained a high pace of investments reaching over 260 investment decisions, leveraging EUR 3.4 from other investors for each Euro invested by the EIC fund, and reinforcing the EIC's role as the largest deep tech investor in Europe. Furthermore, demand for support under the EIC remains very high with the October cut-off for the Accelerator attracting over 1 200 full proposals, the largest number to date. The high number of applications for the calls for **EIC Pathfinder** (over 1 500) and **Accelerator** (over 1 200) highlights the EIC's strong appeal. Notably, opening up **EIC Transition** to Pillar 2 applicants has resulted in the largest response to a single call of just under 400 proposals.

General objective 3: AN ECONOMY THAT WORKS FOR PEOPLE

The following specific objective, with relevant result indicators reflected in the annex (performance table, page 14 in the annexes), covers the broad spectrum of RTD activities contributing to the ‘Economy that works for the people’ objective.

Specific objective 3.1: Research and innovation actions, increased RTD investments and the RTD component of the European Semester boost economic growth and jobs creation

Cross-cutting initiatives feed into several policy objectives, such as economic competitiveness and resilience, sustainability and digitalisation, and technological sovereignty. This notably included in February 2024 **the Communication on Advanced Materials for Industrial Leadership**. Amongst the



14 actions announced key achievements have been the first meeting of the Technology Council on Advanced Materials, the preparation of an EIT Academy on advanced materials, a new programmed partnership IAM4EU and an enhanced dialogue with Japan. Supported by Member States and DG GROW the proposal for an IPCEI on advanced materials has advanced into the design phase.

The preparatory work for the **Strategy for Artificial Intelligence (AI) in Science** and **the European AI Research Council** planned for 2025 has advanced, as well as the insightful work carried out **on knowledge valorisation and the subsequent Codes of Practice** adopted in spring 2024.

Regarding the activities related to **knowledge valorisation**, the Competitiveness Council adopted **Council Conclusions on Strengthening knowledge valorisation as a tool for a resilient and competitive industry and for strategic autonomy in an open economy in Europe**, laying an ambitious list of actions for the Commission and the Member States that will advance the implementation of knowledge valorisation in the Union. In this area, DG RTD delivered two Commission recommendations on the **Code of Practice for industry-academia co-creation** and the **Code of Practice for citizens’ engagement for knowledge valorisation**. The **awareness raising campaign on knowledge valorisation** continued in 2024, with national events taking place in the Netherlands, Ireland and Croatia, Austria and Hungary.

The **European Partnership on Metrology**, the measurement science, continues to be an important driver of innovation. The steering group met twice to enhance the openness of the

metrology partnership to industry, to representatives of the scientific community and to regulators/standard setters



On **industry**, the pioneering work **on Industry 5.0** and **Beyond GDP** tackled societal needs under a new paradigm of industrial progress coupled with societal well-being and environmental stewardship. The pilot of **the Industry 5.0 Community of Practice**, involving 100 industrial stakeholders, produced initial deliverables which included

establishing Industry 5.0 as a transformative agenda for industrial research and innovation and co-developing a prototype learning and assessment tool designed to assist companies in transforming their organisational models amid ongoing green and digital transitions.

Furthermore, the Commission published **the EU Industrial Research & Development Investment Scoreboard**, presenting the annual update of **R&D investments** of companies worldwide and in the EU which is a cooperation of DG RTD and the Joint Research Centre. 30 policy documents referred to the EU Industrial R&D Investment Scoreboard findings and conclusions, among those **the Draghi report on the “Future of European Competitiveness”**. In addition, the work to develop a data warehouse for use by the Commission on private sector RTD investments in a set of technologies and industrial ecosystems was completed and work to enrich it and to exploit it has been launched, with the potential to make it part of a broader technology monitoring system.

DG RTD has also kept contributing to the successful implementation of the Recovery and Resilience Facility. The DG analysed and carried out discussion on the targets and milestones related to **RTD investments and reforms agreed in the RRP (Recovery and Resilience Plans)**. The DG has strongly contributed to the successful launch of the **European Semester in 2024** through the preparation, analysis and elaboration of the RTD analysis per country, including drafting the dedicated innovation annexes.

The **Policy Support Facility (PSF)** has enabled the launch and completion of **4 Mutual Learning Exercises** on topics supporting the implementation of the ERA Policy Agenda and addressing key RTD challenges: these exercises focused on **‘RTD and public engagement’, ‘EU missions’, ‘Industry Decarbonisation’ and ‘Knowledge valorisation’**.



During 2024, DG RTD has continued to engage with Member States in bilateral **Enhanced Dialogues**. Three additional Enhanced Dialogues were carried out in the first half of 2024 with Estonia, Germany and The Netherlands, and discussions to carry out six new Enhanced Dialogues are well advanced, with Denmark already confirmed for January 2025.

Building on the ongoing work on **the Expert Group on the Network of RTD policy makers and Managing Authorities (RIMA)**, a draft set of policy recommendations to improve synergies between Horizon Europe and the European Regional Development Fund (ERDF) have been prepared. In the meanwhile, the work with Member States and DG REGIO to implement concrete synergies has continued successfully. The first projects under EIC Accelerator, MSCA and ERA Fellowships are being funded with transfers from ERDF to Horizon Europe for Lithuania and Malta. Other countries have expressed an interest to transfer part of their ERDF allocations, and the first informal discussions have started (e.g. with Slovakia, Spain, Romania).

The collaborative platform for a culture and creativity-driven European innovation ecosystem that was launched at the Spanish presidency event in July 2023 continued its work (EKIP project). The CCI platform is a key part of DG RTD's efforts to establish a new vision for **Europe's Cultural and Creative Industries (CCIs)**, as the engine of an innovation ecosystem contributing decisively to Europe's future competitiveness, well-being, and social cohesion. 12 new projects for and with the CCIs have been launched, with a total budget of approximately EUR 48 million. A report has been elaborated in cooperation with the European University Institute, though not yet published.

DG RTD continued to contribute to this specific objective through economic and statistical analysis and it published on 8 July the **European Innovation Scoreboard (EIS)** and the **Regional Innovation Scoreboard (RIS)**, providing a comparative assessment of the Research and Innovation performance of EU Member States, other European countries, and regional neighbours and of European regions. The scoreboards help countries and regions assess the relative strengths and weaknesses of their national and regional innovation systems and identify challenges that they need to address.

Work has continued on **economic and statistical analysis** to support policy initiatives of the Commission on a range of topics related to RTD policy, such as the green and digital transitions, transformative RTD policies, directionality, technological sovereignty, the use of AI in science, innovative capacity, productivity and business dynamism. These analyses were published in the RTD paper series of DG RTD and fed into the preparation of the **2024 edition of the Science, Research and Innovation Performance (SRIP) of the EU report**. The SRIP was published in June 2024. The evidence and analysis included in the report were used and cited in several policy analyses and reports, **most notably the Draghi report** on the EU's competitiveness, and **the Heitor report** providing strategic recommendations on how to maximise the impact of the future RTD programme. **Additional exploratory studies** will improve the evidence base for policy interventions related to the objectives of the new European Innovation Agenda. Further support was also given to **foresight activities** that inform the future of the EU, including European RTD policy.

General objective 4: A STRONGER EUROPE IN THE WORLD

The following specific objective, with relevant result indicators reflected in the annex (performance table, page 14 in the annexes), covers the broad spectrum of RTD activities contributing to the Commission's headline ambition 'A Stronger Europe in the World'.

Specific objective 4.1: Regional research and innovation strategies and broader association policy contribute to promoting common European RTD values and creating a global Research and Innovation Space

In 2024, there were key achievements related to the association of third countries to Horizon Europe, bringing the number of Associated Countries to 19. ⁽⁷⁾

RTD cooperation with the EEA EFTA countries Norway and Iceland has been substantial since their association to the Framework Programme more than 30 years ago via the EEA Agreement. Our RTD systems are deeply interlinked and so are our industrial value chains and academia networks. Norway is playing an important role in contributing to multiple RTD Framework Programmes' excellence, as shown for instance in Climate, Energy, Mobility and Health research. The EU-Norway Green Alliance meeting of 24 September 2024 highlighted the excellent performance of Norwegian researchers and organisations in clean related actions of Horizon Europe. In addition, 3 Norwegian cities were selected in 2024 among the 112 cities under the Horizon Europe Cities Mission.

In January, the **United Kingdom** became associated to Horizon Europe (with the exception of the European Innovation Council (EIC) Accelerator Fund). In July, an Association Agreement was signed with **Canada**, making it the second non-neighbouring third country to become associated to Pillar II only (after New Zealand in 2023). As regards other global RTD partners, association negotiations were concluded with the **Republic of Korea**, and initiated with **Japan**, whereas pre-negotiation exploratory talks were initiated with **Singapore**. In the neighbourhood, negotiations were concluded in December with **Switzerland** on its association to Horizon Europe and the Euratom research and training programme. The signing of the agreements with Switzerland and the Republic of Korea are expected in 2025. Association negotiations were also initiated with **Egypt**. With those important developments over the course of 2024, it is expected that the number of Associated Countries will reach between 21-24 in the next years. This also implies a **substantial financial input to RTD activities carried out under Horizon Europe**. ⁽⁸⁾

⁽⁷⁾ In 2024, the Associated Countries reached 19: Albania, Armenia, Bosnia and Herzegovina, Canada, the Faroe Islands, Georgia, Iceland, Israel, Kosovo*, the Republic of Moldova, Montenegro, New Zealand, North Macedonia, Norway, Serbia, Tunisia, Türkiye, Ukraine and the United Kingdom.

⁽⁸⁾ With the addition of the UK and Canada in 2024, the combined annual financial contribution of the Associated Countries is reaching close to 3 Billion EUR.



In 2024, DG RTD committed to ensure the implementation of **the European Economic Security Strategy** in the field of RTD, in line with **the EU's Global Approach** to RTD, to keep international cooperation in RTD open and safe. In this context, DG RTD promoted EU's leadership and competitiveness through Horizon Europe, including

by investing in strategic technologies that are critical for **economic security**, leading on the risk assessment in biotech - one of the 4 critical technologies currently being assessed - and by partnering in RTD with non-EU countries around the world when in the EU's specific interest.

DG RTD has applied limited and relevant safeguards in Horizon Europe to ensure economic and research security. For instance, it coordinates the work on **the application of article 22.5 of the Horizon Europe regulation**, which allows to protect the Union's strategic assets, interests, autonomy or security, restricting participation in a limited number of topics.

The Council Recommendation on enhancing research security was adopted in May 2024 on the basis of the Commission proposal put forward in January. It aims at raising awareness and building resilience at national and sectoral levels relying on self-governance by the sector ('with **academic freedom comes academic responsibility**') combined with support from the government (providing information, guidance, and advice).

DG RTD coordinated and monitored the implementation of the Global Approach to RTD across the Commission and with the Member States through the ERA Subgroup on the Global Approach to RTD. The subgroup adopted two recommendations on **Africa and China** and finalised the proposal for the international dimension of the European Research Area.

As part of the Multilateral Dialogue on principles and values for international cooperation in research & innovation, the Commission co-organised, together with **the Belgian Presidency**, an international Ministerial conference on principles and values for international RTD cooperation in Brussels in February 2024.

DG RTD also set up five working groups, which delivered the recommendations for a future European framework for Science Diplomacy in 2024.

On **the cooperation with United States**, the Joint Consultative Group meeting in March 2024 confirmed the willingness to reinforce cooperation with biotechnology as a new priority area. The EU-US Energy Council at Ministerial level of March 2024 confirmed the commitment to cooperate on fusion research, climate modelling and Carbon Capture Utilisation and Storage. Fruitful cooperation continued multilaterally notably in marine research with **the All Atlantic Ocean Research and Innovation Alliance**, in energy through **Mission Innovation**, and in health within a number of international platforms. A

new **EU-US Joint Statement** setting the strategic priorities for future cooperation was approved by the Council in November and signed by the US end December. The cooperation under the Trade and Technology Council on e-mobility and interoperability with smart grids was successfully completed with the publication of the second set of recommendations.

RTD cooperation in 2024 continued to contribute to the EU Arctic Policy leading up to **the launch of the European Polar Coordination Office (EPCO)** on the occasion of the European Polar Science Conference. The event was co-organised with the European Space Agency as part of the DG RTD cooperation initiative.

As regards cooperation with **Latin American and Caribbean countries (LAC)**, the July 2023 EU-CELAC Summit gave significant impulse to bi-regional cooperation and DG RTD continued throughout 2024 the preparation of the LAC Initiative; a package of targeted collaborative actions in the Horizon Europe 2025 Work Programme. The EU-Latin American and Caribbean countries Innovation Cooperation Initiative launched in October 2023, gave rise, in 2024, to networking events between EU and LAC incubators and accelerators. An ERC Implementing Arrangement was signed with the Brazilian National Council for Scientific and Technological Development (CNPq) to enable researchers based in **Brazil** to join ERC research teams.

Discussions with **China** picked up on the Joint Roadmap for EU-China Cooperation in science, technology, and innovation. In June, an agreement was reached on all points linked to the research framework conditions in the roadmap (mobility of researchers, ethics and integrity, access to RTD programmes, exchanges on RTD policies).

DG RTD continued to focus on implementing **the African Union (AU)-EU Innovation Agenda**: two workshops were organised in 2024, one on access to finance for start-ups and innovators, and one on public health innovation. The AU-EU Innovation Dashboard was launched, an online compendium of initiatives implementing the agenda. The Monitoring, Evaluation and Learning framework methodology of the AU-EU Innovation Agenda was successfully developed.

In 2024, DG RTD continued to support the implementation of **the Union for the Mediterranean and the Partnership for Research and Innovation in the Mediterranean Area (PRIMA Partnership)**. The PRIMA amendment was adopted in April 2024 to allow for an extension until 2027 and international agreements with the five PRIMA Participating States not associated to Horizon Europe are ongoing: Algeria, Egypt, Morocco, Lebanon and Jordan.

The 14th India-EU Joint Steering Committee on Science & Technology (S&T) Cooperation was held in Brussels on 25 September 2024 acknowledging the robust and fruitful cooperation between the EU and India in Science and Technology. Both sides agreed to renew the EU-India Science and Technology (S&T) Agreement for another five years (2025-2030).

The implementation of **the Western Balkans Agenda** on Innovation, Research, Culture, Education, Youth and Sport continued in 2024 to contribute to the economic development, regional cooperation, strengthening of the innovation capacity, and promoting scientific

excellence, and reforms of the region's education systems. Concrete results in 2024 includes a strengthened participation in Horizon Europe; three Western Balkans cities (Sarajevo, Podgorica and Elbasan) among cities selected for the Horizon Europe Smart and Climate Neutral Cities Mission; and 11 official partners of the New European Bauhaus based in the Western Balkans – with a winning project coming from Montenegro.

Progress continued in the implementation of **the RTD dimension of the Eastern Partnership (EaP)** which aims at boosting the RTD capacities of the five EaP Partner countries and strengthening RTD regional cooperation. Despite the difficult geopolitical and economic situation in the region, all EaP Partner countries managed to implement some governmental reforms, adopt and launch the implementation of national Science strategies, and increase their participation in Horizon Europe.

A key milestone in **EU-Türkiye RTD cooperation** was the 2nd EU-Türkiye High-Level Dialogue in Istanbul on 25 April. It assessed ongoing RTD cooperation, discussed future collaboration opportunities between academia and business, and agreed on the importance of a stronger integration of RTD capacities and technology transfer activities, coupled with human capital development, to succeed with the green and digital transitions.

RUSSIA'S WAR OF AGGRESSION AGAINST UKRAINE

In 2024, the **Horizon Europe Office in Ukraine**, hosted by the National Research Foundation of Ukraine, actively promoted funding opportunities and offered support in drafting proposals and finding partners in Europe.

DG RTD continued its support **to Ukraine's RTD actors and ecosystem**, focusing on three key objectives: (1) sustain scientific assets and activity in Ukraine and support Ukrainian researchers in Ukraine; (2) prepare for the bilateral screening meeting to be held with Ukraine (as well as Moldova) in view of the ongoing accession negotiations; and (3), continue to advocate for the role of RTD in Ukraine's reconstruction, notably, through the G7.

Regarding the direct **sanctions on Russia**, the Commission continued to ensure full respect of the sanctions, notably to avoid that organisations and/or individuals subject to the sanctions participate in any capacity in Horizon Europe. Following **the 14th Sanction Package**, further changes with specific relevance to EU funding were adopted. Article 5l of Regulation (EU) No 833/2014 was amended, by extending the prohibition of providing direct or indirect support to any entity established in Russia, as well as to any entities whose proprietary rights are directly or indirectly owned more than 50 % by entities established in Russia.

On **Euratom**, DG RTD launched the second project under the **Euratom Research and Training Programme** on diversification of nuclear fuel supply for nuclear reactors in the EU and Ukraine that were developed in the Soviet Union and are therefore dependent on Russian nuclear fuel. These projects will contribute to a swift and secure development and deployment of a European fuel solution for the concerned nuclear reactors.

The Euratom Work Programme 2023-2025 provided for a named beneficiary grant to support relevant education and training programmes for nuclear safety in Ukraine, and to contribute to the capacity building and networking actions to strengthen Ukrainian and EU nuclear research. The project started in late 2023 and has run throughout 2024.

POTENTIAL IMPACT OF THE CRISIS IN THE MIDDLE EAST ON PALESTINE'S AND ISRAEL'S PARTICIPATION IN EU PROGRAMMES.

Following the ongoing Middle East conflict and in particular the 7 October 2023 terrorist attacks by Hamas with subsequent response by Israel, some stakeholders, including Horizon Europe grantees, have questioned the eligibility and ethical compliance of Israeli entities in EU RTD programmes, leading to multiple requests and media queries to the Commission. DG RTD prepared a note on "Guidance for Commission Services on Israeli Legal Entities Participation in Horizon Europe", which was distributed to relevant services on 2 July 2024 to guide the cooperation with Israel and to ensure consistent responses to emerging issues regarding Israeli participation in Horizon Europe.

General objective 5: PROMOTING OUR EUROPEAN WAY OF LIFE

The following specific objectives, with relevant result indicators reflected in the annex (performance table, page 15 in the annexes), cover the broad spectrum of the RTD activities contributing to the 'Promoting our European way of life' objective.

Specific objective 5.1: Research and Innovation develop and deploy solutions, technologies and innovations to tackle emerging threats and improve crisis preparedness

DG RTD kept working on **the Union's crisis preparedness** and dedicated around 60% of the budget of Cluster 6 – Food, Bioeconomy, Natural Resources, Agriculture and Environment – to climate relevant RTD actions.

The **COVID-19 pandemic** highlighted the need, to be better prepared in health crisis, for large-scale, **multi-centre clinical trials** for generating robust evidence on medical countermeasures to combat diseases. In response, the European Commission enabled the set-up of **European platform trials** for COVID-19 therapeutics and vaccines, which have contributed to identifying better treatment options for the management of COVID-19 patients, and to improving our understanding of the immune response to vaccines.

In the past two years, efforts have shifted to further strengthen and consolidate the clinical research ecosystem, enabling platform trials for preparedness for future epidemics or pandemics. The preparations for the Horizon Europe co-funded Partnership on Pandemic Preparedness are at the centre of these efforts, covering the full spectrum of research preparedness. This is complemented by **the clinical trial coordination**

mechanism (CT-CM) aimed at improving the coordination of priorities and funding of clinical trials in response to a public health emergency, co-chaired by DG RTD and DG HERA.

Specific objective 5.2: Research and innovation support the European health initiatives, including the European plan to fight cancer

In 2024, DG RTD actively supported health research and innovation and the **European plan to fight cancer**. The EU **Cancer Mission** 2024 call made EUR 119 million available to 12 selected proposals. In 2021-2022-2023, DG RTD supported 48 projects for a total of EUR 378 million in 2024 under the Cancer Mission.

The Cancer Mission organised a high-level conference on **“Innovative palliative care for people with cancer”** in October, and also continued its **engagement with young cancer survivors**, which has led to a research topic in the Cancer Mission on late effects of treatments as well as a study on provision of young cancer survivors care in Europe under EU4Health.

The **Cancer Mission** organised a **bus roadshow in Poland, Lithuania, and Romania**, with experienced doctors and nurses volunteering their time to provide free consultations and advice on cancer prevention and cancer survivors sharing their stories. The outreach was impressive: more than 16 800 visitors, nearly 11 million people through the media. Standout moment, the Iasi Regional Oncological Institute brought their "oncobus" to provide free mammograms and HPV screenings.

In 2024, DG RTD contributed to the implementation of the 2023 **Communication on a ‘Comprehensive approach to mental health’**. Horizon Europe’s European partnership on Brain Health is under preparation, aiming to deliver on brain research including mental health, a key flagship initiative of the Communication.

General objective 6: A NEW PUSH FOR EUROPEAN DEMOCRACY

The following specific objective, with relevant result indicator reflected in the annex (performance table, page 16 in the annexes), cover the broad spectrum of RTD activities contributing to the ‘New push for European democracy’ objective.

Specific objective 6.1: European research and innovation support citizens’ involvement, social inclusion and equalities in Europe, including through communication of the European RTD added value

All along 2024, DG RTD’s key policy initiatives have been systematically accompanied by **specific communication actions** to increase the visibility of the EU’s support to foster RTD in Europe. It has increased the visibility of the EU’s actions to foster RTD in Europe. It has, for instance, launched and promoted the **Cancer Mission implementation** page and newsletter, a much-awaited initiative that supplements the policy website, and has provided

the latest information on **the Mission rollout**, results, and engagement opportunities for stakeholders as well as the general public.

The RTD's Framework Programme **has celebrated its 40 years anniversary** in 2024, and it has been the opportunity to highlight the main outcomes of the 40 years support to RTD at European level during DG RTD's flagship event the "**European RTD Days**" which took place in March 2024. A communication campaign was also done across **Commissioner Ivanova's and DG RTD's social media channels** featuring four themed weeks highlighting historical milestones and **the EU's vision for a fair, green, and competitive Europe**. To enhance engagement, the campaign also incorporated timely hooks, such as



references to **the Nobel Prizes**, international themed days, and the release of the independent expert report on the Horizon Europe interim evaluation.

DG RTD continued to support the implementation of **the European Democracy Action Plan**. An expert report on **Fragilities of democracy in the EU and its neighbourhood**, with **policy recommendations** drawing on results of H2020 and Horizon Europe projects, is under finalisation. By now, over 100 Horizon Europe projects worth about EUR 300 million work on issues related to shaping the future of democracy, its enhancement through diversity and inclusion, its digital transformation, resilience to undue influences on democracies, including **disinformation**, geopolitics and the role of the EU in the world, and **how to make our democracies more robust in times of poly-crisis**.

To implement the **ERA policy agenda on inclusive gender equality** developed with Member States, Associated Countries and Stakeholder organisations, DG RTD worked on the action **Promoting gender equality and fostering inclusiveness**, publishing the '**Zero-Tolerance Code of Conduct on Counteracting gender-based violence**, including sexual harassment, in the EU research and innovation system'.

DG RTD also implemented strengthened provisions for gender equality in Horizon Europe. Notably, the follow-up to the pilot check of compliance with the **Gender Equality Plan (GEP) eligibility criterion** indicated deficiencies in GEPs among 59% of the checked entities, informing further actions to support and monitor compliance. In May 2024, the **second ceremony of the EU Award for Gender Equality Champions** awarded 3 academic and research organisations for outstanding results achieved in the implementation of their gender equality plans.



The preparation of the triennial **She Figures report 2024** has been finalised in view of its publication in February 2025. The report will provide the latest available data on the state of gender equality in RTD and policy analysis, including a new index allowing for cross-country comparison.

Based on the request of the European Parliament, the Commission has prepared the terms of reference for a study, kicked off in September 2024, that will allow to better understand the situation regarding the **freedom of scientific research** in Europe and it will provide the Commission with a solid foundation to present a proposal later in the mandate.

An ERA policy Agenda Mutual Learning Exercise on **Public Engagement in RTD** started in 2024. The Horizon Europe's project European Citizen Science launched the **EU-Citizen Science platform**, and the project IMPETUS awarded the 2024 **European Union Prizes for Citizen Science**. The fieldwork for the **Special Eurobarometer on Knowledge and Attitudes to RTD** was conducted in September–October 2024.

The **EuroScience Open Forum (ESOF) 2024** was organised in Katowice in June 2024, in the context of the **European City of Science**. Attendance of ESOF was low and confirmed the decision to discontinue the “City of Science” call in 2026, replacing it with the new initiative “Science comes to town”. Similarly in Katowice, in 2024 DG RTD organised the 35th edition of the **EU Contest for Young Scientists (EUCYS)** and the 2nd edition of **EUTalentOn**, with winners receiving, respectively, a total of EUR 62 000 and EUR 75 000.

General objective 7: A MODERN, HIGH PERFORMING AND SUSTAINABLE EUROPEAN COMMISSION

The following specific objective, with relevant result indicator reflected in the annex (performance table, page 17 in the annexes), cover the broad spectrum of activities contributing to the ‘A modern, high performing and sustainable European Commission’.

The Common Policy Centre (CPC) and the Common Implementation Centre (CIC) provide the framework for policy planning, programming and implementing the Research & Innovation framework programme. The overarching priorities are simplification, harmonisation, and equal treatment of beneficiaries, which result and enter in the concept of **a modern, high performing and sustainable Commission**. This is achieved through optimised tools and processes, including for partnerships, missions, synergies, feedback to policymaking, and the exploitation of results.

Specific objective 7.1: The Common Implementation Centre (CIC) and Common Policy Centre (CPC) provide user-friendly services and tools to the European Commission for effective and efficient planning, programming and implementation of the Research and Innovation Framework Programme and other EU programmes

The CPC supported the final stages of the development and the adoption of the **Horizon Europe Strategic Plan 2025-2027** and the last amendment to **the 'main' Work Programme 2023-2024** through further co-creation and co-design work. The CPC has also been working on the preparation of the 'main' Work Programme for 2025.

Between June and September 2024, the CPC steered a 'peer review' process allowing services in the lead for cross-cutting policy priorities (international cooperation, gender, SSH, open science, synergies, etc.) to **provide feedback** on the different work programme parts on how to better integrate horizontal aspects in the work programme texts.

In the context of the preparatory work for **the next multiannual financial framework**, the CPC coordinated the reply to the spending review for **Horizon Europe and Euratom** and identified lessons learnt for the future. The spending review assessed each of the current spending programmes, with a strong focus on **their performance, their EU added value and their contribution to EU priorities**. With the objective **to avoid overlaps and reduce the administrative burden** (both for the Commission and beneficiaries), the spending review also assessed synergies between EU programmes and room for simplification and rationalisation.

The CPC has steered the preparation of the Horizon Europe **Draft Budget 2025**, adopted by the Parliament on 27 November 2024. This process entailed integrating the impact of the **EUR 2 billion** net cut resulting from the mid-term revision of the Multiannual Financial Framework. The CPC took proactive measures to reach an optimal budget implementation at the end of the year. The Research family successfully achieved an almost full implementation rate



of the operational budget (i.e. 99.99%) both in commitment and payment appropriations. For the first time since 2021, the Global Transfer exercise results in a need for reinforcement of **EUR 255 million** for Horizon Europe, showcasing the program's recovery from the delayed adoption of its legal framework and underscoring Horizon Europe's high absorption capacity.

In order to increase **synergies between Horizon Europe and other EU programmes**, the CPC continued organising regular meetings of the two networks: RTD synergies correspondents' network (members from DG RTD and the agencies) as well as the Interservice Synergies Network – ISN (members from across the Commission).

The CPC organised monthly meetings of the Expert Group on **the Interim Evaluation of Horizon Europe**. The work will inform on the future FP for RTD, based on the evidence collected as part of the Horizon 2020 and Horizon Europe evaluation exercises. The resulting final report of the Expert group on the interim evaluation of Horizon Europe was released on 16 October during an event which gathered the interest and on site and online presence of key stakeholders in the research and innovation field.



The CPC presented the results of the **ex-post evaluation of Horizon 2020** (adopted in January 2024) to the other EU institutions, highlighting the programme’s scientific, economic and societal impact. The evaluation will also inform areas for improvement and feed into the interim evaluation of Horizon Europe.

The CPC also actively supported the financing of the **EIC Challenges** for 2025 by proposing the use of the budget flexibility reserves accumulated since 2021. Following

the Internal Audit Service (IAS) recommendations stemming from its audit on the Horizon Europe governance, the CPC led the work on the implementation of these recommendations on different improvement strands. All IAS recommendations due so far have been finalised and sent for review to IAS on time.

The follow-up actions related to the IAS audit on Horizon Europe performance have been completed ⁽⁹⁾, including the proposal for medium term and long-term performance targets, which were validated by the Horizon Europe Executive Committee.

Four Horizon monitoring flashes were published: newcomer participation, hydrogen, SME participation and on country participation. The CPC prepared and published also the **annual report on Research and Technological Development Activities** and the **annual monitoring of Horizon Europe for the year 2023**.

The CPC has been working on transforming the current **Horizon Results Platform** into an **Innovation Portal** (including the integration of EIC marketplace needs), contributing to building the “**Innovation One-Stop-Shop**” as foreseen in the European Innovation Agenda. The Horizon Results Platform continues to work with its partners ⁽¹⁰⁾ to organize thematic

⁽⁹⁾ please see Annex 8 for details.

⁽¹⁰⁾ Enterprise Europe Network, European Institute of Innovation and Technology and their Knowledge Innovation Communities, European Intellectual Property Helpdesk, the European Business Angels Network and Business Angels Europe, Solar Impulse Foundation

pitch events, promote corporate open innovation challenges, communicate relevant calls and hold dedicated webinars on relevant topics to accelerate beneficiaries' go-to-market journey. Substantial progress has been made in 2024 in relation to our **Feedback to Policy work, in particular the implementation of the Framework launched by DG RTD**. In parallel, further efforts were implemented to support **knowledge management** within the Commission's services, in particular by promoting knowledge management within the DG through tools such as **CountryPedia** and the **Briefing Library**.

To increase the **visibility and uptake of research results**, continuous support is provided to Horizon beneficiaries and staff working in the domain, via dedicated services, such as the **Booster**, the **Horizon Results Platform**, and **CORDIS**. The new Booster Framework Contract has been signed in May 2024, as a continuation of the previous Horizon Results Booster. With a budget of EUR 14.4 million, the Booster will support beneficiaries to share and use their research results and create further impact.

In 2024, the CIC continued to maintain and improve the implementation framework of Horizon Europe, with a specific focus **on further simplification** and ease of access, **client centricity**, legal robustness, assurance and control, coordination and synergies in funding bodies and Executive Agencies, as well as providing state of the art and fully digitised grant management systems.

Amongst others, the CIC has:

- Continued **the rollout of simplified cost options such as lump sums and unit costs** in Horizon Europe. An additional significant wave of lump sum funding in the work programmes for 2024 was launched, accounting for 27% of the total call



budget. Lump sums are now used for all Advanced Grants in the ERC Work Programme 2024, and for all the main funding schemes in the EIC Work Programme 2024. In addition, the ERC and EIC work programmes for 2025 were adopted, with a share of call budget for lump sum topics of 26% (ERC) and 66% (EIC) respectively. Furthermore, continuous work was done on achieving the target of 35% budget share for lump sums in the 'main' work programme 2025. Following an in-depth analysis of lump sum grants, they continue to be popular with users and **are perceived as reducing the administrative burden**.

- Introduced the **optional unit costs for personnel** following the announcement by **Commissioner Ivanova** during the 2024 RTD Days, and successfully launched in May 2024. It is now fully operational. To enable this, the Horizon Europe work

programme and the corporate Model Grant Agreement (MGA) were updated, as well as related business procedures and IT developments.

- Implemented the **Client Centricity Project**, notably regarding the revamp of the EU Funding and Tenders Portal, which was launched on 18 March 2024 during the R&I Days. The revamp features an improved user experience and includes new AI-powered functionalities. It also introduces new functionalities for publishing highlights, news and events, improving therefore the outreach dimension of the Portal. Moreover, in June 2024, the design stage of the mobile application (EU Funding & Me) was finalised, which will work in a synchronised manner with the Portal.
- Proposed a **Guidance for Developing Policy Requirements in Horizon Europe ('implementation fiche' initiative)** to integrate implementation aspects early on (legal, business process, and IT-wise) into the development of policy requirements.
- Continued to adapt eGrants, the corporate IT suite enabling fully electronic, seamless grant management, to the needs of (to date) 62 EU funding programmes. A major milestone was achieved by making eGrants ready for the SUMMA migration in early 2025, including via a successful pilot test with the Clean Aviation Joint Undertaking.
- Looking ahead, the preparations of **the next generation of eGrants** for the future multiannual financial framework 2028-2034 increased momentum, with the organisation of workshops and the procurement of an eGrants benchmarking study.
- Coordinated and concluded the tender procedure for **the triennial evaluation of the executive agencies** covering the period 04/2021-04/2024.
- Lastly, the **Joint Controllershship Arrangement (JCA) on personal data** processing operations within the Single Electronic Data Interchange Area (SEDIA) was signed and endorsed by the GPSB.

The **CIC's Common Legal Support Service (CLSS)** has been involved in a range of legal activities and provided important and continuous legal and drafting support, amongst others: finalise the first complete draft of the Annotated Model Grant Agreement (AGA), published on 1 May 2024 and drafted other decisions (delegating powers), provided legal support on all association processes, article 22's.

The **Common Audit Service (CAS)** achieved its audit closure target for the Horizon 2020 programme. The CAS completed the first selections related to the Horizon Europe audit campaign as foreseen. In addition, the CAS Annual Audit Plan 2024, the Horizon Europe Working Arrangements, the indicative audit programmes for Marie Skłodowska Curie Actions and for the System and Process Audits (SPA) have been agreed. Last but not least, the CAS continued to contribute to targeted webinars aimed at **raising awareness on errors and irregularities** in financial reporting by beneficiaries, to reduce the error rate.

The CIC **Common Service for Business Processes** has finished analysing the pilot on blind evaluation, dedicated to overcoming any real or potential reputational bias in the evaluation process. Blind evaluations were introduced for proposals submitted in the first stage of 16

of the 17 two-stage calls in the Horizon Europe work programme 2023-2024 (with the exception of one Widening call). The pilot will continue until the end of Horizon Europe.

The **CIC's Common Service for Executive Agencies and Funding Bodies** supported the implementing bodies under its mandate in ensuring business continuity by providing legal drafting, administrative and financial advice and support on implementation and statutory aspects. For the Executive Agencies particular attention was given to the supervision framework. With regard to Joint Undertakings, it monitored compliance with the governance arrangements applicable. In addition, particular attention was given to financial and operational provisions – for example on the staffing reserve financed from contributions by third countries – as well as to monitoring and evaluation, including on the phasing-out plans.

The **Common IT Service** continued to harmonise and improve the workflows supporting the various processes for Horizon Europe grants, as well as to deliver new IT developments supporting the various policy needs. The Common IT Service's modernisation project "eGrants Next Generation" continued to be rolled out successfully.

Rationalisation of reporting requirements

President von der Leyen reiterated the importance of the political commitment **to rationalise reporting requirements and reduce them by 25%**, without undermining the related policy objectives.

DG RTD is working on **the revision of the reporting templates** already proposing revision of sections of the reporting template with a clear focus on achieving the objective of 25% reduction. Wherever answers can be estimated by automated means, the related questions will be removed or limited to a simple confirmation.

In addition, DG RTD is committed to reaching by 2027 the target of **using lump sum** funding for 50% of the total call budget. As projects using lump sums do not have financial reporting obligation, their use can result in an additional reduction of beneficiaries' reporting requirements. It is estimated that for lump sum grants this reduction is equivalent to a saving of 2.1% of the total grant value, which corresponds to **a saving of 21% - 35% of the administrative costs** of the project.

In May 2024, the introduction of **the optional unit costs for personnel** is the third successful action done by DG RTD to reduce these reporting requirements. To enable this, DG RTD updated the Horizon Europe work programme and the corporate MGA, as well as related business procedures and IT developments.

Reliability of performance information

DG RTD started applying the established corporate criteria for the reliability of performance information. Based on the current processes in place, DG RTD did not identify any significant issue related to the reliability of performance information.

DG RTD is adapting its internal processes to be fully in line with the new framework for ensuring the reliability of performance information. This work has already started and will continue in 2025 towards the development of an improved reporting framework.

2. INTERNAL CONTROL AND FINANCIAL MANAGEMENT

Management monitors the functioning of the internal control systems on a continuous basis and carries out an objective assessment of their efficiency and effectiveness. In annex 7, there is a list and details of the reports that have been considered. The results of the above assessment are explicitly documented and reported to the Director-General.

DG RESEARCH AND INNOVATION AND THE RESEARCH AND INNOVATION FAMILY

The control framework presented in this report should be seen in the overall context of the responsibilities of DG RTD in implementing Horizon Europe (HE), Horizon 2020 (H2020), and Euratom.

Management modes for the programmes' implementation

The responsibility for implementing the EU Framework Programmes for Research and Innovation is shared among different Directorates-General in the Commission. In order to focus on core institutional policy tasks, these Directorates-General have delegated substantial parts (for DG RTD, the major part) of the programme implementation to Executive Agencies, Joint Undertakings (also called Article 187 bodies) and Public-Public Partnerships with the Member States (also called Article 185 bodies). The multitude of actors involved in the implementation of the EU Framework Programmes for Research and Innovation is referred to as the **'Research and Innovation Family' (RTD Family)**.

DG RTD coordinates the Research and Innovation Family

DG Research and Innovation, as the lead DG of the RTD Family, invests considerable resources in coordinating the management of Horizon 2020 and Horizon Europe by the members of the family, well beyond its own budget appropriations. In addition to its coordination activities within the family, the DG, as parent DG of the RTD Executive Agencies, monitors and supervises their activities. DG RTD is the lead parent DG of REA, ERCEA and EISMEA.

The key role of the Common Implementation Centre in simplifying, harmonising and supporting the underlying Horizon 2020 and Horizon Europe business processes is presented in Annex 7.

2.1. Control results

Management uses control results to support its assurance and reach a conclusion about the cost-effectiveness of those controls, meaning whether the right balance between the following elements is achieved:

- **Effectiveness** The level of error found, based on the controls carried out.
- **Efficiency** The average time taken to inform or pay.
- **Economy** The proportionality between the costs of controls and the funds managed.

2.1.1. Overview of the budget and relevant control systems (RCS)

DG Research and Innovation's assurance building, and materiality criteria are outlined in annual activity report annex 5. The annual activity report annex 6 outlines by relevant control system the main risks together with the control processes to mitigate them and the indicators used to measure the performance of the relevant control systems.

Direct management concerns grants given to beneficiaries through the implementation of the EU Framework Programmes (Horizon 2020, Horizon Europe and Euratom) as well as subsidies paid to Executive Agencies.

Indirect management concerns subsidies to grant-implementing entrusted entities: Joint Undertakings (Article 187 bodies), Public-Public Partnerships (Article 185 bodies) as well as financial instruments provided by the European Investment Bank and the European Investment Fund.

In 2024, indirect management accounted for 61% of payments and direct management for the remaining 39%. As in 2023, DG Research and Innovation's main budget management mode for the year was indirect management.

Both direct and indirect grant management⁽¹¹⁾, together with the EIC Fund financial instrument, accounted for 90.64 % of the DG RTD's payments in 2024. Control results for these payments are presented in this report. No payments took place for InnovFin in 2024 but the control result of the supervision of InnovFin is also presented as it includes controls related to InnovFin non expenditure items (see section d).

The other expenditures relate mainly to public procurement (5.95%).

Table 1: Overview of the budget implemented in 2024 by DG Research and Innovation broken down by the different control systems under which the payments were authorised⁽¹²⁾

⁽¹¹⁾ Including payments to Executive Agencies (EUR 225.14 million) and not including the prefinancing contribution paid to decentralised agency (EUR 9.8 million)

⁽¹²⁾ For the cross-subdelegation granted to DG GROW by DG RTD in 2023, DG GROW committed EUR 150 000 and no payments took place in 2024. The reports on this cross sub-delegation received DG GROW did not provide indication of any particular unfavourable observation with regard to the regularity and legality.

Control system	Management mode	Payments 2024		Cumulative
		(M€)	%	%
Contributions to grant implementing entrusted entities: Joint Undertakings (article 187 bodies) and Public Public Partnership (article 185 bodies) (RCS B)	Indirect	717,68	42,32%	42,32%
Financial Instruments (EIC FUND) (RCS C)	Indirect	301,50	17,78%	60,10%
Grants (RCS A)	Direct	292,86	17,27%	77,37%
Executive Agencies (RCS B)	Direct	225,14	13,27%	90,64%
Procurements	Direct	100,88	5,95%	96,59%
Other	Direct	45,91	2,71%	99,30%
Contribution to decentralised agency (EIT HE)	Indirect	9,80	0,58%	99,88%
Experts	Direct	2,11	0,12%	100,00%
Grand Total (M€)		1.695,88	100%	

2024 revenues amount to EUR 3 003 million vs EUR 522 million in 2023), accounting for 96,27% of Horizon Europe assigned revenues, including contributions from both accessing countries and third countries accessing the program. The level of the overall amount of assigned revenues increased in 2024 following the association of new third countries to the Horizon Europe.

Assets (EUR 4.638,11 million), liabilities (EUR -219,42 million) and off-balance sheet (EUR -2.145,32 million) regarding Financial Instruments (InnovFin/RSFF and EIC Fund) ⁽¹³⁾ are detailed in section c) "Assessment of control results for non-expenditure items"

Legal commitments for Euratom grants amount to EUR 165.61 million in 2024. ⁽¹⁴⁾

RTD family direct and indirect grant management for H2020 and HORIZON

The RTD Family operates on a common audit strategy intended to contribute to the legality and regularity of expenditure on a multi-annual basis, including detection and correction of non-systemic and systemic errors.

For Horizon 2020 (H2020) and Horizon Europe (HORIZON), the Common Audit Service (CAS) of the Common Implementation Centre (CIC) carries out all the financial audits ⁽¹⁵⁾, including those concerning grants managed by the Executive Agencies and the Joint Undertakings. This is a major step towards ensuring efficiency gains, a harmonised approach, legal certainty, equality of treatment of beneficiaries and the least audit burden on beneficiaries.

⁽¹³⁾ In 2023 these non-expenditure items were: Assets (EUR 3 410.70 million), liabilities (EUR -284.76 million) and off-balance sheet (EUR -2.356.38 million) regarding Financial Instruments (InnovFin/RSFF)

⁽¹⁴⁾ The significant legal commitments not covered by budgetary commitments and disclosed by DG RTD are 23 multiannual EURATOM commitments with annual instalments, for which not yet covered amount is EUR 165.61 million.

⁽¹⁵⁾ Except audits for article 185 bodies.

The **main indicators** on legality and regularity of EU Framework Programmes for Research and Innovation are the **cumulative representative detected error rate**, and the **cumulative residual error rate** ⁽¹⁶⁾.

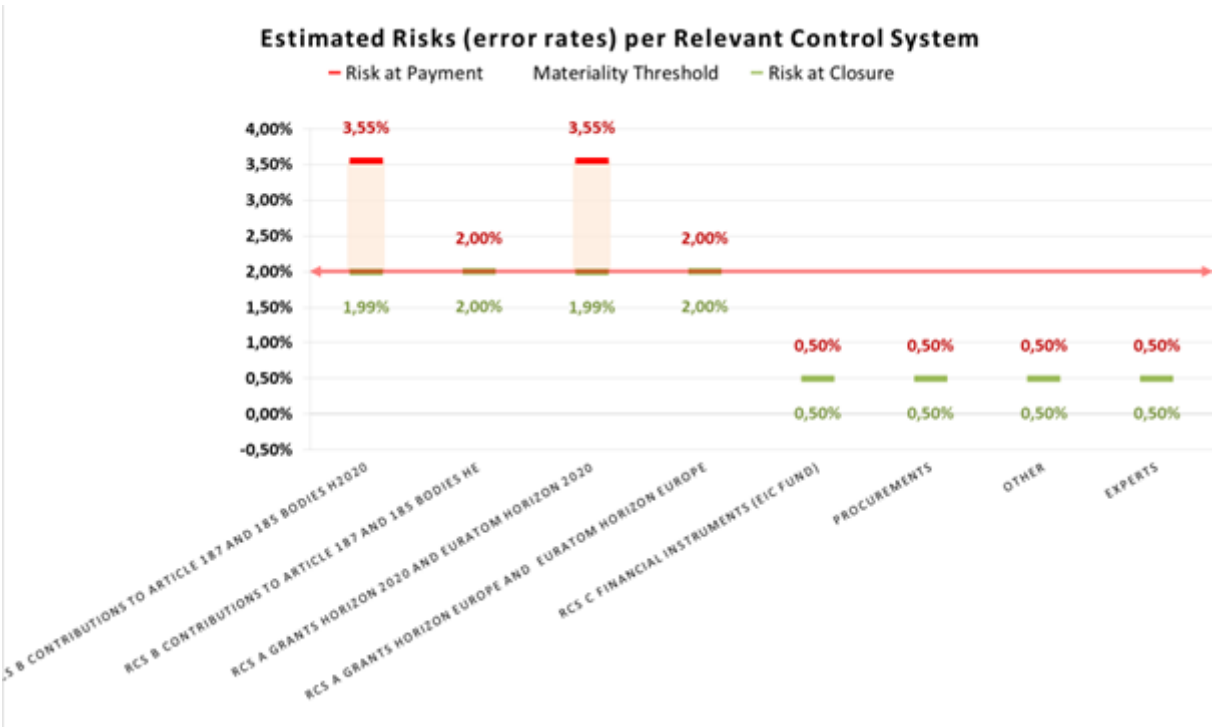
The **targets as** set out in annex 5 materiality criteria are respectively:

- For Horizon 2020, to ensure that the cumulative detected error rate remains within a range of 2-5 %, aiming to be as close as possible to 2%.
- For Horizon Europe, to ensure that cumulative detected and residual error rates do not exceed 2% ⁽¹⁷⁾.

Annex 7 presents the audit coverage for H2020 and the implementation of the audit target for 2024.

2.1.2. Effectiveness of controls

A. Assessment of control results per RCS for expenditure



Control results for DG RTD research family and DG RTD grant management.

Horizon 2020 Framework Programme

⁽¹⁶⁾ DG Research and Innovation’s assurance building, indicators and materiality criteria are outlined in annual activity report annex 5.

⁽¹⁷⁾ No representative error rate for Horizon Europe is available in 2022, 2023 and 2024 as the ex-post audit campaign for the Programme has been launched in the second half of 2024.

The error rates based on the audit work for Horizon 2020 Framework Programme for Research and Innovation on 31 December 2024 are:

- **Cumulative representative detected error rate** for the Framework Programme: **3.55%** ⁽¹⁸⁾
- **Cumulative residual error rate** for the Framework Programme: **1.79%** (1.99% for DG Research and Innovation¹⁹).

In 2024 the cumulative residual error rate for Horizon 2020 for the grants managed directly by DG Research and Innovation is calculated at 1.99%, which is below the materiality threshold.

The relatively high level of error in Horizon 2020 grants is linked to the applicable funding model, which is based on the reimbursement of eligible actual costs. Most of the errors relate to incorrect claims for personnel costs that are mainly due to beneficiaries' lack of thorough understanding of the inherently complex rules. Newcomers and Small and Medium Enterprises (SMEs) are more prone to errors in comparison to more experienced/large size beneficiaries.

Since RTD Framework Programmes are multi-annual, the error rates, and the residual error rate in particular, should be considered within a time perspective. Specifically, the implementation of the audit results over time will tend to lower the cumulative residual error rate thus increasing its difference with the representative detected error rate.

These error rates are calculated on the basis of the audit results available when drafting the Annual Activity Report. They should be treated with caution as they may change subject to the availability of additional data from audit results. The yearly fluctuation of the detected error rate in H2020 exhibits no identifiable correlation with the maturity of the programme.

There is evidence that the simplifications introduced under Horizon 2020, along with the ever-increasing experience, help in reducing the number of errors made by the beneficiaries, especially when compared to the Seventh Framework Programme where the error rate was higher and varied from close to 5% to around 5.5% over time. Notwithstanding these efforts, beneficiaries still make errors. Actions carried out to address these weaknesses are reported in annex 7.

Horizon Europe Framework Programme

2024 was the fourth year of implementation of the Horizon Europe Framework Programme. No representative error rate for Horizon Europe is available in 2024 as the ex-post audit campaign for the Programme was launched in the second half of 2024, once a meaningful number of payments was available for audit. Consequently, without elements allowing an

⁽¹⁸⁾ Based on the 765 representative results out of the 944 expected in the six Common Representative Samples.

⁽¹⁹⁾ It should be noted that in 2021 most of Horizon 2020 grants managed by DG Research and Innovation were delegated to Executive Agencies. Hence, this figure is based only on the actions that remained with the DG.

assessment of the level of errors and taking into account the simplifications introduced for Horizon Europe that aim to reduce the error rate, a 2% ⁽²⁰⁾ detected and residual error rate will be considered for DG Research and Innovation.

Euratom Framework Programmes

The Euratom Programme (2014-2018) Regulation ⁽²¹⁾ and the Euratom (2019-2020) Regulation ⁽²²⁾ complements the Horizon 2020 Regulation. The Euratom Audit Strategy is articulated as a complement to the one of Horizon 2020. For the Euratom Programme (2014-2018), the 2024 cumulative detected error rate is 1.52%. However, in the AAR 2024, only the Horizon 2020 error rate has been presented and used for the estimation of the amount at risk, as the Euratom error rate is not statistically representative.

The Euratom Programme (2021-2025) follows the same rules for participation and grant management as Horizon Europe ⁽²³⁾. Consequently, its error rate estimation is aligned with that of Horizon Europe. The Euratom Programme's (2021-2025) Audit Strategy was recently launched, which is based on the lessons learnt from the Audit Strategy of the Euratom Programme (2014-2018). A multi-annual cumulative detected error rate cannot be provided at this time.

Control results for Executive Agencies, Joint Undertakings, Public-Public Partnerships

Control results for Executive Agencies

In 2024, DG Research and Innovation was the lead parent DG of the Research Executive Agency (REA), the European Research Council Executive Agency (ERCEA) and the European Innovation Council and SME Executive Agency (EISMEA). DG Research and Innovation is also a parent DG of the European Health and Digital Executive Agency (HaDEA) and of the European Climate, Infrastructure and Environment Executive Agency (CINEA), as these two agencies implement parts of Horizon 2020 and Horizon Europe.

In 2024, DG Research and Innovation paid EUR 225.14 million to the REA, ERCEA and EISMEA to cover their administrative expenses.

DG Research and Innovation effectively supervised the three Executive Agencies for which it is lead parent DG. For EISMEA and ERCEA, no issues warranting a mention in this report were identified.

⁽²⁰⁾ These rates correspond to the objective set for Horizon Europe.

⁽²¹⁾ Council Regulation (Euratom) No 1314/2013 of 16 December 2013 on the Research and Training Programme of the European Atomic Energy Community (2014-2018) complementing the Horizon 2020 Framework Programme for Research and Innovation (OJ 347/84, 20.12.2013).

⁽²²⁾ Council Regulation (Euratom) 2018/1563 of 15 October 2018 on the Research and Training Programme of the European Atomic Energy Community (2019-2020) complementing the Horizon 2020 Framework Programme for Research and Innovation, and repealing Regulation (Euratom) No 1314/2013

⁽²³⁾ Council Regulation (Euratom) 2021/765 complementing the Horizon Europe Regulation.

For REA, a reputational reservation related to the grants part of the Promotion of agricultural products (AGRIP) was included in its AAR in 2023. The reservation will be maintained in the 2024 AAR. The issue identified is specific to this DG AGRI grants scheme and does not affect though the DG RTD's annual declaration.

Control results for Joint Undertakings (Article 187 bodies)

The Joint Undertakings Circular Bio-Based Europe (CBE), Clean Aviation (CA), Clean Hydrogen (CH), Global Health European & Developing Countries Clinical Trials Partnership (EDCTP3) ⁽²⁴⁾ and Innovative Health Initiative (IHI) implement parts of the Horizon 2020 and Horizon Europe Framework Programmes, under the governance and oversight of DG RTD ⁽²⁵⁾.

In 2024, these Joint Undertakings received from DG Research and Innovation a total of EUR 604.78 million of payments for operational and running costs.

The Joint Undertakings apply the same audit strategy as the Commission services.

The Joint Undertakings' 2024 Annual Activity Reports are under preparation. At this stage, DG RTD identified no particular issue warranting a mention in this report.

The Court of Auditors gave a positive opinion on the 2023 Accounts of all the Joint Undertakings under DG Research and Innovation's governance. All of them had a residual error rate below 2%.

Control results for Public-Public Partnerships (Article 185 bodies)

Article 185 of the Treaty enables the EU to participate in research programmes undertaken jointly by several Member States, including participation in structures created for the execution of national programmes. The bodies supported under Article 185 in 2024 are the following: Research for the benefit of SMEs (EUROSTARS2), European Partnership on Metrology ⁽²⁶⁾, European and Developing Countries Clinical Trial Partnership (EDCTP2), and Partnership for Research and Innovation in the Mediterranean Area (PRIMA).

In 2024, DG Research and Innovation paid a total of EUR 112.9 million to Art.185 bodies for operational and running costs ⁽²⁷⁾.

Following the review of the submitted Annual Activity Reports 2023, DG Research and Innovation did not identify any particular issues warranting a mention.

⁽²⁴⁾ A new Joint Undertaking, the Global Health EDCTP3 (EDCTP3 JU) was established through Council Regulation 2021/2085 (SBA). DG RTD was responsible for the initial operations until it became autonomous on 23 November 2023.

⁽²⁵⁾ Annex 13 of this report summarises the underlying legal and financial parameters of the Joint Undertakings' operations.

⁽²⁶⁾ European Partnership on Metrology which is the Horizon Europe successor of European Metrology Programme for Innovation and Research (EMPIR) took over the activity of EMPIR end 2021.

⁽²⁷⁾ Annex 13 details the respective legal bases and the amounts entrusted to each body.

The 2024 Annual Activity Reports of the partnerships have been received and are under review. Based on other elements of assurance, as presented in the monitoring arrangements (Annex 7), the AOSD concluded that there is no particular issue warranting a mention in this report.

Control results for Financial Instruments

EIC Fund

In 2023, DG RTD concluded multiparty negotiations allowing the adoption of a third Commission decision and a communication to the college on the restructuring of the EIC Fund. It comprised a set of agreements, including a contribution agreement with the European Investment Bank (EIB), under which the EIB becomes the 'investor of record' of the EIC Fund and thereby brings the EIC Fund under indirect management from 1 January 2024.

The set of additional agreements [Articles of association, share transfer and assignment agreement, subscription agreements (for the H2020 and Horizon Europe compartments, separately), confidential private placement memorandum, advisory agreement and a side letter agreement] accompanying the contribution agreement ensure that the Commission can continue to provide policy steer in line with the objectives of the EIC and has the power to terminate at any time.

Moreover, in 2023 the EISMEA Delegation Instrument and the corresponding Memorandum of Understanding for the EISMEA were reviewed accordingly, setting the frame for indirect management of the EIC Fund. The above actions addressed the findings of the IAS audit on the design and early implementation of the European Innovation Council (EIC).

The Commission has received, with delay, and accepted all the annual reports () for the fiscal year 2023, foreseen in the statutory and governing documents of the Fund, including the four quarterly bank statements for 2023. According to the review, none yielded a reservation or issues to flag.

The unaudited unified financial accounts (UUF) for 2024 have been transmitted by the EIC Fund manager to the EIB, with both DG BUDG and RTD in copy. The EIB submitted to RTD the unaudited reporting package, including the UUF on the 6 March 2025. This represents a minor delay with respect to the official deadline set up in the contribution agreement (15 February). However, the causes for this delay have been identified and corrected to ensure the timely submission of the next deliverables.

For the fiscal year 2024, all reporting obligations of the EIC Fund stipulated in the statutory and governing documents of the Fund, including the four quarterly bank statements for 2024, were received and assessed, except for the audited financial statements and the audit

opinion (expected by 15 April 2025). EISMEA's review of the document received identified no issues.

Additionally, an analysis of the 2024 unaudited financial statements indicated that the administrative expenses and fees are aligned with the activities and outputs of the EIC Fund, and that the Advisory fees did not exceed the predetermined maximum ceiling, as defined in the EIC Work Programmes.

According to the information provided, no weaknesses in the Commission's supervision of the EIC Fund or in the management of the entrusted budget were observed, other than matters brought to the attention of the EU Commission by the EIC Fund in accordance with the Penta-Partite Memorandum (PPM). Consequently, there is no issue affecting DG RTD's annual declaration of assurance.

InnovFin

The auditors reported their confirmation on no findings in any of the Innovfin monitoring/audit exercises and hence DG RTD has no audits to follow up upon from 2024. Moreover, the analysis of both reports, indicated that there is nothing to follow up or pursue in either report.

The 2024 annual reports have been timely received on 15 February 2025 and are under review for the three instruments (EIB Loans, EIF SME Guarantee (SMEG) and EIF InnovFin equity (IFE)).

Additionally, the following reports and statements were timely received on 15 March 2025.

- management declaration of assurance annexed to the financial statements in the form defined in the Financial and Administrative Framework Agreement,
- summary report on audits and controls carried out in the period in question, including an analysis of the nature and extent of errors and identified weaknesses in systems if any, and any corrective actions taken or planned,
- independent audit opinion on the management declaration and the summary report on audits and controls.

So far, there are no particular issues that would need to be addressed in DG RTD annual activity report. DG RTD made no significant payments for Innovfin in 2024.

For the 2024 audited financial statements of all three instruments, confirmation has been received that no matter potentially damaging the financial interest of the Union has been identified.

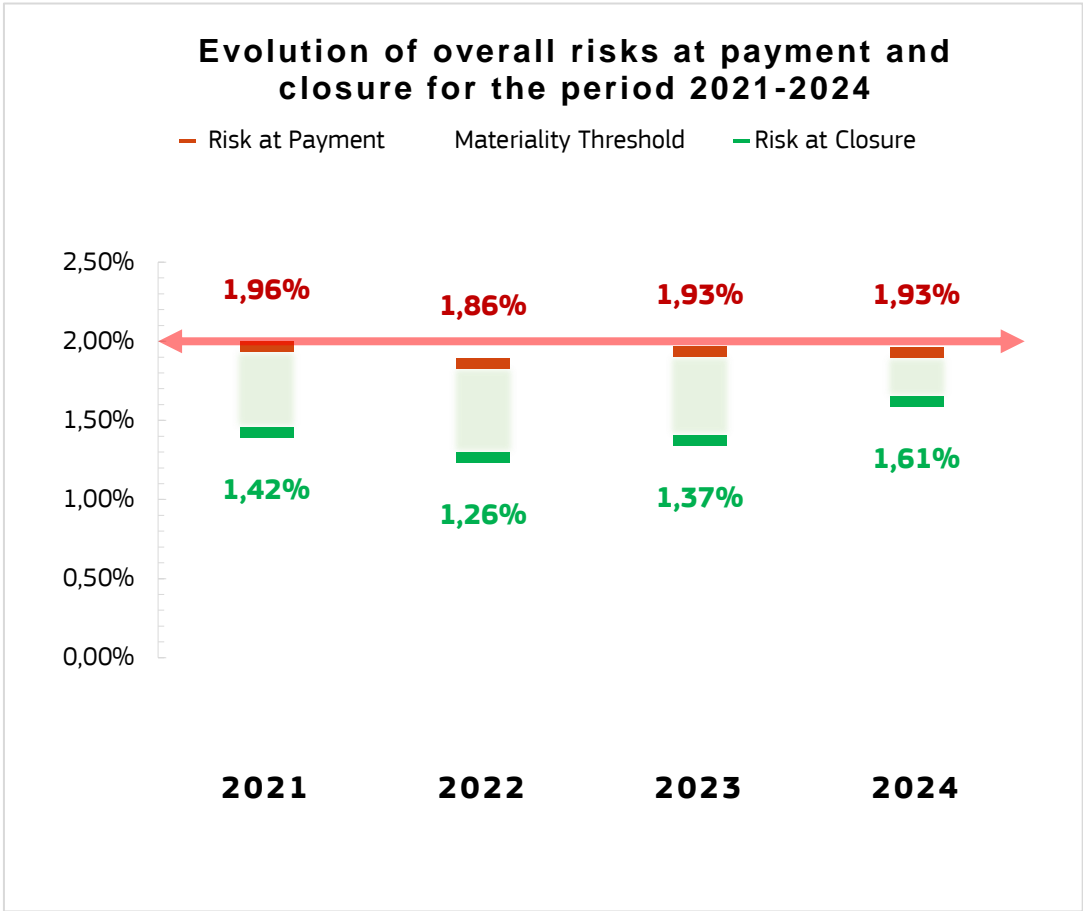
The 2024 audited Financial Statements for Risk Sharing Finance Facility (RSFF) (legacy from FP7) have been timely received on 15 March 2025. Moreover, special reporting and an amendment to govern the nearing termination of the RSI/RSFF were exchanged and dedicated meetings on the closure of the RSI part of the facility resulted in a preliminary

agreement on reporting after termination which was realised in December 2024. The RSFF will be fully terminated in early 2025.

Considering the values of the relevant indicators contributing to the objective of enhancing access to risk finance for investing in research and innovation (Industrial leadership), the performance of InnovFin during its active lifetime exceeded expectations. More specifically, based on the latest data provided by the entrusted entities, the total volume of investments mobilized via debt financing and venture capital investments since the launching of the programme reached EUR 55.1 billion against a target of EUR 15 billion at the design phase of the programme. The cumulative number of funded organisations reached 45 978 against a target of 5 000. Finally, the total amount of leveraged private funds reached over EUR 45 billion against a target of EUR 35 billion.

In its Note on audits conclusion, signed on 23 February 2024, of its follow-up audit in the Directorate-General for Research and Innovation, the IAS concluded that all recommendations from the audit on the European Union Finance for Innovators (InnovFin) have been adequately and effectively implemented and will therefore be closed.

B. Estimation of the overall risk at payment and risk at closure



The estimated overall risk at payment for 2024 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, corresponding to the conservatively estimated future corrections for 2024 expenditure. The difference between those two results is the estimated overall risk at closure ⁽²⁸⁾.

The overall risks at payment and at closure are below 2% since 2021. There is a slight increase of the risk at closure in 2024 (0.24%) because the risk at closure for H2020 grants increased in 2024.

For an overview at Commission level, the departments' estimated overall risk at payment, estimated future corrections and risk at closure are consolidated in the Annual management and performance report (AMPR).

C. Quantitative benefits of controls: Preventive and corrective measures

With its ex-ante and ex-post controls, DG RTD has an effective mechanism in place for detecting and correcting errors, reaching in total EUR 3.48 million of corrections for 2024 (vs EUR 1.16 million in 2023). Ex-ante controls resulted to EUR 0.005 million and ex-post controls resulted to 3.48 EUR million. Please see details in annex 3 table 8.

The increase compared to 2023 is mostly explained by 2 recoveries following OLAF investigation (EUR 0.8 million) and audit implementation in EURATOM projects (EUR 2 million).

D. Assessment of control results for non-expenditure items

DG Research and Innovation’s main assets, liabilities ⁽²⁹⁾ and off-balance sheets ⁽³⁰⁾ relate to items managed and controlled in the context of financial instruments (InnovFin/RSFF and EIC FUND), as detailed in the table below:

	Amount in EUR million
A.I.4. Non-Current Financial Assets (Financial instruments: Available for Sale Investments)	3.692,26
A.II.1. Current Financial Assets (Available for Sale Financial Assets liquidable during the year)	279,81
A.II.6. Cash and Cash Equivalents (Current accounts and other liquidities < 3 months)	666,05
P.II.3. Current Financial Liabilities	-219,42

⁽²⁸⁾ 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.

⁽²⁹⁾ Source of data: Table 4 in Annex 3 reports on DG RTD's overall assets and liabilities.

⁽³⁰⁾ Source of data: Table 5 BIS in Annex 3 reports on off balance sheet

Intangible assets are IT software, which represented EUR 55 million at the end of 2024. One medium-priority incident had an impact on one of DG RTD's systems. The issue has been successfully mitigated, and the case was closed on 16th October 2024 after thorough investigation and follow-up actions. The response ensured no further exploitation could occur and the system's security posture has been reinforced.

E. Fraud: prevention, detection, and correction

The Common Anti-Fraud Strategy in the RTD Family (RAFS), jointly with its Action Plan, sets out broad principles to counter external fraud in grant expenditure in Research & Innovation (RTD) Framework Programmes by building relevant preventive and detective measures. The RAFS was set-up in 2012 and updated over the years in line with the OLAF methodology. The update (2023 RAFS) was adopted by the Horizon Europe Steering Board on 22 February 2024. The Common Audit Service (CAS) coordinates the implementation and updates of the Common Anti-Fraud Strategy in the RTD Family (RAFS).

The Fraud and Irregularities in Research (FAIR) Committee, chaired by the CAS, remains the main forum of the RTD Family on anti-fraud matters. This Committee develops, regularly monitors and ensures reporting on the implementation of the RAFS action plan to the HE Executive Committee. In 2024, the FAIR Committee met twice with the main objective of discussing the implementation of the 2023 Common RTD Anti-fraud Strategy Action Plan. The first meeting was mainly dedicated to the presentation of the draft guidelines for beneficiaries on financial support to third parties (FSTP) developed by a FAIR working group. The second meeting followed up on the state of play of latter guidelines, including the ongoing consultation with DG BUDG. Furthermore, account taken of the contribution of several FAIR Committee's members, a common template for a survey on anti-fraud awareness was discussed. The survey would be managed and launched by each RTD service, and its results could help to evaluate the level of knowledge of staff and their training needs, in line with the Anti-fraud Strategy Action Plan.

Awareness-raising actions on anti-fraud remains one of the objectives of the RAFS. The CAS continued to raise awareness towards beneficiaries on the importance of anti-fraud during the 11th HE Legal & Financial National Contact Points Meeting of 24 October 2024 and the Horizon Implementation Day of 05 November 2024. The CAS continues to actively cooperate with the European Anti-Fraud Office (OLAF) on fraud prevention via the Commission Fraud Prevention and Detection Network (FPDNet), on case selections and investigations.

The CAS also continues to cooperate with the European Public Prosecutor's Office (EPPO), when necessary. The CAS actively participates in the Commission-EPPO working group on information exchange between EPPO and Commission services, established in October 2023.

DG RTD received 6 OLAF financial recommendations during the period 2020-2024. 1 of them has been fully implemented and 1 of them was partially implemented. The implementation of 4 OLAF financial recommendations remains ongoing.

A separate DG RTD Anti-fraud strategy (DG RTD AFS) covers all spending areas except grants – i.e. fraud risks related to financial instruments, procurement, expert management, prizes etc. The DG RTD AFS was established in 2012 and last updated in December 2022 in line with OLAF's methodology. It covers the period 2022-2025. The Action Plan of the DG RTD AFS focuses on raising staff awareness on the rules of ethics, with particular emphasis on possible conflicts of interest in the DG. Its implementation is being monitored and reported to the management twice a year. All necessary actions have been implemented. The results achieved during the year thanks to the anti-fraud measures in place can be summarised as follows:

- All newcomers colleagues attending the Welcome sessions in 2024 (including those online) were made aware of the importance of ethics in their duties.
- DG RTD staff received communication related to ethical aspects. On the basis of the available information, DG Research and Innovation has reasonable assurance that the anti-fraud measures in place are effective overall.

2.1.3. Efficiency of controls

Based on an assessment of the most relevant efficiency control results, DG Research and Innovation reached a positive conclusion.

Grant management

This section presents the main efficiency performance indicators of the control system in DG Research and Innovation for Horizon 2020, Horizon Europe including Euratom namely **Time-to-Inform (TTI)**, **Time-to-Grant (TTG)** and **Time-to-Pay (TTP)**. Some additional indicators on ex-post audits are presented in Annex 7.

By the end of 2024, 15 987 Horizon Europe grant agreements (21 of which in DG RTD) and 13 Framework Agreements had been signed for a total EU contribution of EUR 53.97 billion (EUR 38.74 million of which in DG Research and Innovation). Horizon Europe currently enjoys a success rate of 16.65 % ⁽³¹⁾, i.e., a little over 1 out of 6. Finally, by the end of 2024, 69 Euratom grant agreements were signed (35 of which in 2024) with an EU contribution of EUR 808.85 million.

Time-to-Inform (TTI)

During 2024, 99.17 % of the Horizon Europe main-listed proposals received the information letters within five months (153 calendar days) from the respective call deadline. On average, information letters for all main-listed proposals were sent within 126 days.

⁽³¹⁾ The respective success rate for H2020 was 11.95%

Table: Horizon Europe Time-to-Inform

Period	DG Research and Innovation		Research and Innovation family	
	Signed Grant Agreements where TTI <= 153 days	Average TTI for main-listed proposals (days)	Signed Grant Agreements where TTI <= 153 days	Average TTI for main-listed proposals (days)
2021-2024	95%	54	84.51%	129
2024	100%	37	99.17%	126

During 2024, 100 % of the Euratom Horizon Europe main-listed proposals received the information letters within 5 months (153 calendar days) from the respective call deadline. The average Time-to-Inform period was 53 days.

Table: EURATOM Time-to-Inform

Period	DG Research and Innovation	
	Signed Grant Agreements where TTI <= 153 days	Average TTI for main-listed proposals (days)
2021-2024	98.25%	122
2024	100%	53

Time-to-Grant (TTG)

During 2024, 92 % of Horizon Europe grant agreements were signed within 8 eight months from the respective call deadline, with an average of 218 days.

For the period covering 2021-2024, the respective figures were 86 % and 227 days.

Table: Horizon Europe Time-to-Grant

Period	DG Research and Innovation		Research and Innovation family	
	Signed Grant Agreements where TTG <= 245 days	Average TTG for main-listed proposals (days)	Signed Grant Agreements where TTG <= 245 days	Average TTG for main-listed proposals (days)
2021-2024	85%	140	86%	227
2024	100%	120	92%	218

During 2024, 100 % of the Euratom Horizon Europe grants were signed within 8 months (245 calendar days) of the respective call deadline. The average Time-to-Grant period was 114.33 days.

Table: EURATOM Time-to-Grant

Period	DG Research and Innovation	
	Signed Grant Agreements where TTG <= 245 days	Average TTG for main-listed proposals (days)
2021-2024	100%	219.04
2024	100%	114.33

Timely payments

For year 2024, the timely payment score for DG Research and Innovation is 100%. It is similar to last year. ⁽³²⁾.

Timely Payments	RTD Score	EC Score
	100%	99%

Joint Undertakings (Art. 187), Public-Public Partnerships (Art. 185) and Executive Agencies

During 2024, significant efforts were undertaken to ensure:

- An increased cooperation between (lead) parent DGs to further enhance the supervision framework of executive agencies.
- As of 1 January 2024, following the third Commission Decision on the completion of the restructuring of the European Innovation Council (EIC) Fund (C(2023)8183, 4.12.2023) and as described in the Communication to the Commission accompanying that Decision, the supervision and control of the EIC Fund operations has been entrusted to the EIB, in line with the applicable provisions in the Financial Regulation for indirect management. In the new setting, EISMEA's role in monitoring and supervision is limited to the grant component of the EIC Accelerator and the fulfilment of its tasks for the coordination between the grant component and the equity investments by the EIC Fund, as well as assisting DG RTD in fulfilling its role in supervision and monitoring.
- The audit on the design and early implementation of the European Innovation Council was closed by the IAS in 2024, following the implementation of the last open recommendations by EISMEA and DG RTD. The IAS presented lessons learnt during the Steering Committee that took place in December 2024.
- The drafting and update of several harmonised templates and decisions for Joint Undertakings, in close cooperation with the operational units in charge of the Joint Undertakings and the Joint Undertakings themselves (i.e. Financial Framework Partnership Agreement, Consolidated Annual Activity Report, Annual Work Programme, Governing Board decisions, Synergy Agreement).
- The implementation of harmonised IT tools, with the support of RTD and horizontal IT units, and based on the operational feedback of Joint Undertakings. This included notably the launch of two tools for the planning and reporting of in-kind contributions to additional activities, launched in May and October 2023, respectively.

⁽³²⁾ Details on the calculation of this Timely Payments' indicator is presented in Annex 4: Financial Scorecard.

- Setting up a horizontal approach regarding the impact of UK association to Horizon Europe on the budgets of Joint Undertakings, in close cooperation with the CPC.
- The correct reporting by Joint Undertakings on their Phasing Out Plans, as required by the Single Basic Act.
- The smooth implementation of European Partnership on Metrology ⁽³³⁾, the successor of the article 185 body EMPIR, by preparing the necessary templates (e.g. Financial Framework Partnership Agreement/Contribution Agreements; the Model Grant Agreement).

DG RTD is coordinating the 2021-2024 evaluations for all Executive Agencies, which shall be finalised in 2026.

Financial instruments

InnovFin

The Innovfin financial instruments are managed efficiently, in accordance with the delegation agreements concluded with the EIB and the EIF.

EIC Fund

Commitments of the EC with the EIB in relation with the EIC Work Programme 2024, were executed for a total Budget of EUR 585 million.

In 2024, there has been only one payment executed in reply to the request of the EIC Fund. This was executed on the 29/07/2024 and comprised an amount of EUR 299 million (EUR 204 million for companies from the Cut offs before November 2022 + EUR 95 million for the companies selected under the cut off from November 2022 and 2023).

As above, the slight delay in the payment, against the scheduled deadline, was due to a late submission by the EIB of the payment request (received on the 3 July 2024). The amounts correspond to the request initiated by the EIC Fund and correspond to the investment needs.

Regarding the monitoring of the administrative cost, and as defined in the EIC Work Programme, a 10% of the total transferred amounts can be used as a maximum for the administrative fees (total operational costs) of the EIC Fund ⁽³⁴⁾. This amount related to a work programme should suffice for the duration of all investments related to a determined Work Programme. The monitoring of such compliance requires the distribution across a tentative lifespan of the investments of 7 years.

⁽³³⁾ The Decision (EU) 2021/2084 on the participation of the Union in the European Partnership on Metrology jointly undertaken by several Member States entered into force on 1 December 2021.

⁽³⁴⁾ This is not a flat rate. It is a ceiling, monitored constantly to have continuous figures and make projections on the costs.

For 2024³⁵, the projection of maximum administrative fees, indicated a cap of EUR 28 924 600, whereas the preliminary costs are EUR 21 740 736, thereby under the threshold.

In conclusion, the EIC Fund is managed efficiently, in line with the expectations of the EIC Work Programmes.

2.1.4. Economy of controls

This section assesses the costs of the internal control system.

Grant management

In accordance with the Commission central services' guidance (³⁶), the cost of controls in direct grant management is assessed by the cost of the different control measures. The overall assessment is derived from the ratio between these costs and the total amount paid in the year for grants.

The overall cost of the controls in grant management for DG RTD is estimated at 2.76 % (EUR 8.1 million in 2024) of the total implemented budget (in terms of payments) in 2024. The decrease compared to last year's 3.66 % can be attributed to the higher amounts paid.

Therefore, the implementation of controls can be considered as a cost-effective operation taking into account the reduction of economy of scale linked due to the delegation of programme implementation to Executive Agencies that took place in 2021.

The cost of controls for direct grant management is divided into three main categories:

- Costs of controls in DG Research and Innovation (1.33%);
- Costs of the common support services provided by REA for proposal evaluation/selection (0.85%);
- Costs of services for controls provided by the Common Implementation Centre which is hosted by DG Research and Innovation (0.58%).

The calculation of the percentage of costs of controls by category is detailed in annex 7 section 12.

Details of the estimated cost related to shared/pooled control activities carried out by REA for the Research and Innovation family are reported in the annual activity reports of REA.

Joint Undertakings (Art. 187), Public-Public Partnerships (Art. 185) and Executive Agencies

(³⁵) For 2024 there is only preliminary data based on the draft unaudited accounts and provided NAV packages. This information yields a tentative result. For exact verification, however, the calculations should be done with the audited accounts.

(³⁶) Guidance on the estimation, assessment and reporting on the cost-effectiveness of controls- DG BUDG Updated edition – December 2020

Total costs for supervision of Joint Undertakings (Art. 187 bodies-JUs) incurred in 2024 by DG Research and Innovation are estimated at EUR 3.16 million, i.e., 0,52% of the payments made to these bodies in 2024.

Total costs of supervision of Public-Public Partnerships (Art. 185 bodies) incurred in 2024 by DG Research and Innovation are estimated at EUR 0.53 million, i.e., 0.47% of the payments made to these bodies. Total costs of supervision of Executive Agencies incurred in 2024 by DG Research and Innovation are estimated at EUR 4.27 million, i.e., 1.90% of the total expenditure sub-delegated by DG Research and Innovation to them, covering also the administrative costs.

Table: DG Research and Innovation cost of supervision of Executive Agencies, Joint Undertakings and Public-Public Partnerships

Executive agencies and Indirect Grant Management	Payments (a)	FTE	Total direct costs (b)	Horizontal costs (0,16% of payments see table Y annex 6) (c)	Total costs (b) + (c)	Total costs as % of (a)
Executive Agencies	225.135.266,99 €	25,40	3.913.331,73 €	360.216,43 €	4.273.548,16 €	1,90%
Article 185	112.896.328,00 €	2,28	351.275,45 €	180.634,12 €	531.909,57 €	0,47%
Article 187 (JU's)	604.780.883,00 €	14,21	2.188.538,47 €	967.649,41 €	3.156.187,89 €	0,52%
Total	942.812.477,99 €	41,89	6.453.145,65 €	1.508.499,96 €	7.961.645,61 €	0,84%

The supervision of Executive Agencies includes the implementation of their operational budget, which is not a direct part of the DG RTD budget and thus not covered directly by the assurance of this report. During 2024, REA, ERCEA and EISMEA implemented a total of EUR 6 107 million payment appropriations ⁽³⁷⁾ from the 2024 operational budget for research and innovation framework programmes. HaDEA and CINEA implemented EUR 2 803 million payment appropriations. These amounts have been taken into account when assessing the cost-effectiveness of supervision.

The marginal increase in the cost of supervision of Executive Agencies, compared to last year's 1.76 % can be attributed to the higher number of dedicated FTEs. In the case of Article 185 bodies, the increase from 2023's 0.30% could be attributed to the lower amounts paid in conjunction with a greater number of FTEs. Finally, regarding Article 187 bodies, the increase from the previous period's 0.38% can be attributed to the significant drop of the amount paid in 2024.

Overall, the control system put in place for Executive Agencies and indirect management is considered to be cost-effective.

⁽³⁷⁾ Data from ABAC 12/02/2025

Financial instruments ⁽³⁸⁾

InnovFin

In the year 2024, DG Research and Innovation made no payments to neither the European Investment Bank (EIB) nor the European Investment Fund (EIF), for InnovFin, as the programme is pending closure. The EIB drew for the year 2024 for Innovfin SME EUR 397 770 and for Innovfin Equity EUR 205 328 on treasury asset management fees whilst EUR 12 449 553 in revenues was paid back to the Commission. The EIF drew EUR 550 000 for policy incentive fees.

The share of fees of the three instruments in the 2024 payments is in the absence of payments irrelevant, which is due to the legacy status of the instruments. This percentage is no longer comparable with historic values from the active lifetime of the program due to the low number and amounts of payments in this non active/ legacy period and to cashing in arrears from previous periods. The mentioned fees were withdrawn from the EU account according to the terms of the Delegation agreements, which were drafted specifically for the sound management of funds.

The amounts transferred for the management and other fees payable each year vary. For this reason, a full account of the share of management fees out of the total implemented amounts will only be possible upon the closure of the programme.

The supervision of the activities implemented by the EIB and the EIF was carried out in 2024 by 0.3 Full Time Equivalent DG Research and Innovation staff. The total cost of this supervision was estimated at EUR 46 200. No additional cost was considered. See table Y in Annex 7.

EIC Fund

In the year 2024, DG Research and Innovation's payments to the European Investment Bank (EIB) for the EIC Fund amounted to EUR 301.5 million. This amount includes a provision of cash necessary to the execution of investments (EUR 299 Million) together with EUR 2.5 million related to the set up and yearly management fees of the EIB in its role of Intermediary manager of the EIC Fund (as a result of the Commission Decision C(2023) 8183).

Nevertheless, this payment is not directly related to the actual payment of operational costs of the EIC Fund. However, and based on the draft accounts received from the EIC Fund and waiting for the official submission of both unaudited and audited accounts we can provide an indicative split of costs borne by the EIC Fund.

These costs include:

- EUR 5 398 433 for Administrative Fees, including but not limited to Depositary Fees, Legal Fees, Audit fees, Membership Fees, etc, in line with market practices.

⁽³⁸⁾ Please note that the cost of controls for Financial Instruments includes the cost of control of all associated non-expenditure items related to Financial Instruments (as laid out in section 2.1.2D) and cannot be provided separately.

- EUR 16 342 303 for Advisory Fees (EIB Advisory Division).
- EUR 2 500 000 for set up and yearly costs of the EIB as Mandate Division for the EIC Fund.

The supervision of the activities implemented by the EIB was carried out in 2024 by 2.5 Full Time Equivalent DG Research and Innovation staff. The total cost of this supervision was estimated at EUR 0.39 million in addition to the costs of the horizontal control tasks estimated at EUR 0.48 million (0.16% of payments). See table Y in Annex 7.

2.1.5. Conclusion on the cost-effectiveness of controls

Based on the most relevant key indicators and control results reported above, DG Research and Innovation 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.

The first objective of the control system is to achieve the main policy objective – to create growth and jobs, in particular, by contributing to more and better research and innovation in Europe. In this sense, the controls aim to ensure good work programmes, to select the best proposals to be funded and to verify the project’s deliverables.

The second objective of the control system is to ensure that the EU contribution paid to the beneficiaries complies with the internal control objectives. Thus, that legal and regular transactions are carried out in a cost-effective way.

Overall, given:

- the achievements of research and innovation policy as set out in Part 1,
- the quantitative and qualitative benefits arising from the control systems adopted (common approach on processes and interpretation of rules thanks to the Common Implementation Centre, quality of proposals due to reviews which are performed by panels of independent external experts in the scientific field complemented by a real competition for funds, amount of rejected funding following ex-ante checks, and the amount recovered following the implementation of audit result),
- the error rates, which are at levels considered as being appropriate when balanced between different policy objectives and between trust and control,
- the costs of the control system compared to the level of expenditure,

It is considered that the cost-effective control system in place is balanced with the objectives of the research and innovation policy.

The same conclusion applies to the InnovFin financial instruments (managed in accordance with the delegation agreements concluded with the EIB, EIF), the EIC Fund, the Joint Undertakings (Article 187 bodies), the Public-Private Partnerships (Article 185 bodies) and

the Executive Agencies. These are monitored in conformity with the supervision arrangements described above and in a cost-effective manner.

2.2. Audit observations and recommendations

This section sets out briefly the state of play for all audit observations and recommendations reported by auditors related to internal control and financial management – including the limited conclusion of the Internal Auditor on the state of internal control. Further details for IAS and ECA audits can be found in Annex 8.

Where an audit has detected weaknesses affecting any internal control principle or the department’s assurance, a detailed analysis is provided further below in section 2.3 and 2.4, accordingly.

Internal Audit Service

Reported	Audit Title	Accepted Recommendation	State of play in 2024	Impact on the assurance for 2024
2020	IAS Audit on the management of experts in Horizon 2020 grants	Very important: 5 ⁽³⁹⁾	✓	✓
2022	Audit on the performance framework for research	Very important: 2	✓	✓
2022	IAS Audit on the design and early implementation of the EIC in EISMEA, DG RTD and DG CNECT	Critical: 1 ⁽⁴⁰⁾	✓	✓
		Very important: 2, 11	✓	✓
2023	Audit on Horizon Europe governance arrangements, preparation of the work programmes and budget planning, allocation and monitoring	Very important: 1	⌚	✓
2023	Review of the Commission’s risk at payment	Very important: 3	✓	✓
2024	IAS Audit on Horizon Europe Control Strategy	Very important: 1 (Design of the overarching “Control Strategy”), 4 (Design of the <i>ex post</i> controls)	⌚	✓



















In its contribution to the 2024 Annual Activity Report process, the Internal Audit Service concluded that DG RTD’s internal control systems in place for the audited processes proved to be effective with the exception of two very important recommendations stemming from the IAS Audit on Horizon Europe Control Strategy (one on design of the overarching Control Strategy, and one on design of the ex-post controls).

Further information on the IAS recommendations is available in Annex 8.





⁽³⁹⁾ Downgraded to “important” in January 2024 and closed in April 2024

⁽⁴⁰⁾ Downgraded to “important” in March 2024 and closed in December 2024

European Court of Auditors

Reported	Audit Title	Accepted Recommendation	State of play in 2024	Impact on the assurance for 2024
2022	Statement of Assurance (DAS)⁽⁴¹⁾ : Annual reports concerning the 2021 financial year, Chapter 4	1, 5 ⁽⁴²⁾		
2023	Statement of Assurance (DAS)⁽⁴³⁾ : Annual reports concerning the 2022 financial year, Chapter 5	1a ⁽⁴⁴⁾		
		1b, 2, 3, 4		
2024	Statement of Assurance (DAS)⁽⁴⁵⁾ : Annual reports concerning the 2023 financial year, Chapter 5	1, 2 ⁽⁴⁶⁾		
2022	Special Report 15/2022⁽⁴⁷⁾ : Measures to widen participation in Horizon 2020 were well designed but sustainable change will mostly depend on efforts by national authorities	2, 5b ⁽⁴⁸⁾		
		5a		
2023	Special Report 22/2023⁽⁴⁹⁾ : Offshore renewable energy in the EU – Ambitious plans for growth but sustainability remains a challenge	2b ⁽⁵⁰⁾		
2023	Special Report 24/2023⁽⁵¹⁾ : Smart cities – Tangible solutions, but fragmentation challenges their wider adoption	1, 2, 3, 4		
2024	Special Report 08/2024⁽⁵²⁾ : EU Artificial intelligence ambition – Stronger governance and increased, more focused investment essential going forward	5 ⁽⁵³⁾		

Further information on the recommendations of the European Court of Auditors is available in Annex 8.

-  Action plan implemented and closed by IAS or ECA / No impact on the assurance
-  Action plan implementation is ongoing or awaiting review from IAS or ECA
-  Preparation of the action plan
-  Impact on the assurance

⁽⁴¹⁾ <https://www.eca.europa.eu/en/publications/annualreports-2021>

⁽⁴²⁾ Recommendation 1 is being finalised during first quarter of 2025. The implementation deadline for the recommendation 5 is 12/2028.

⁽⁴³⁾ <https://www.eca.europa.eu/en/publications/AR-2022>

⁽⁴⁴⁾ Implementation deadline: 12/2025

⁽⁴⁵⁾ <https://www.eca.europa.eu/en/publications/AR-2023>

⁽⁴⁶⁾ Implementation deadline: mid-2025.

⁽⁴⁷⁾ https://www.eca.europa.eu/en/publications/SR22_15

⁽⁴⁸⁾ The implementation deadline for recommendation 2 is 12/2027. The implementation deadline for recommendation 5b is 12/2029

⁽⁴⁹⁾ <https://www.eca.europa.eu/en/publications/sr-2023-22>

⁽⁵⁰⁾ Implementation deadline: 12/2027

⁽⁵¹⁾ <https://www.eca.europa.eu/en/publications/sr-2023-24>

⁽⁵²⁾ <https://www.eca.europa.eu/en/publications/SR-2024-08>

⁽⁵³⁾ Implementation deadline: 12/2025

2.3. Assessment of the effectiveness of internal control systems

The Commission has adopted an Internal Control Framework based on the highest international standards. ⁽⁵⁴⁾

DG RTD has adapted the Internal Control Framework to their specific characteristics and organisational structure. The internal control systems are suited to achieving its policy and internal control objectives in accordance with the internal control principles, having due regard to the risks associated with the environment in which it operates.

The internal control assessment was performed in compliance with the methodology established by DG BUDG ⁽⁵⁵⁾, based on several sources.

In line with the Commission's Internal Control Framework DG RTD 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 as minor deficiencies were identified related to the IT security risk management at the Commission, and the Horizon Europe Control Strategy.

The improvements and/or remedial measures implemented or envisaged regarding the design of the overarching control strategy and the design of the ex-post controls are:

- Regarding the design of the overarching control strategy, develop a detailed roadmap to implement strategic measures, presenting risks in the DG's Annual Activity Reports, establish a monitoring and reporting mechanism to assess progress and effectiveness of six strategic measures, identify specific risks associated with Horizon Europe, and complete the risks and controls associated with the Relevant Control System for direct management under Horizon Europe.
- Regarding ex post controls, DG RTD should establish a comprehensive framework for conducting ex post controls, define practical modalities for risk-based audit reporting, finalise the SPA methodology and related IT development, explore cross-reliance on audits across directly managed programs, and closely monitor targets for audited participations.

It should be noted that these deficiencies do not have an impact on the assurance since they essentially concern the monitoring of activities and not the activities themselves. For more details on the assessment of the Internal control, please see Annex 8.

⁽⁵⁴⁾ The Committee of Sponsoring Organizations of the Treadway Commission Internal Control Integrated Framework, the golden standard for internal control systems.

⁽⁵⁵⁾ Implementation guide of the internal control framework of the Commission.

2.4. Conclusions on the assurance

Based on the analysis of the results of the controls in place shown in the indicators outlined above, and the examination of the evidence available, DG Research and Innovation's management is in a position to provide **reasonable assurance on the following areas:**

- policy-development activities;
- the processes relating to the selection of contractors and beneficiaries and the underlying financial operations (legal and financial commitments);
- payments relating to administrative expenditure and procurement;
- Horizon 2020, Euratom and Horizon Europe payments for grants;
- management of the INNOVIN and the EIC Fund financial instruments and the underlying financial transactions with the EIB and EIF, and related non-expenditure items;
- payments to Joint Undertakings and Article 185 initiatives;
- the operating subsidy paid to the Executive Agencies.

DG Research and Innovation considers that its overall control strategy is appropriate as it ensures a good balance between low errors and efficient controls at a reasonable cost.

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

2.5. Declaration of Assurance [and reservations]

Declaration of Assurance

I, the undersigned,

Director-General of Research and Innovation

In my capacity as authorising officer by delegation

Declare that the information contained in this report gives a true and fair view ⁽⁵⁶⁾.

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

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

Confirm that I am not aware of anything not reported here which could harm the interests of the institution.

Brussels, 02/04/2025

.....

Marc Lemaître
Director-General DG Research and
Innovation

⁽⁵⁶⁾ True and fair in this context means a reliable, complete and correct view on the state of affairs in the DG/Executive Agency.

3. MODERNISING THE ADMINISTRATION

3.1. Human resource management

In 2024, the results of the 2023 Staff Survey were pivotal in shaping the local **RTD HR Strategy and Action Plan for 2024-2025**. These were developed through an inclusive reflection process to address identified concerns and drive continuous improvement. The final version of the RTD HR Strategy and action plan were presented at the RTD Staff meeting on 22 October 2024. A significant part of actions identified have already been implemented (or defined) in 2024.

The RTD HR strategy 2024-2025 focuses on four key objectives: Talent Management, Workplace & Wellbeing, Culture & Organisation, Leadership & Management. Under each objective a set of actions has been identified to help achieve the vision. DG RTD's commitment to equality aims to foster equal opportunities, prevent discrimination, and facilitate gender balance and diversity through targeted actions. This commitment has been reflected in the **Charter for a Smart, Equal, Sustainable and Inclusive Workplace** outlining twelve key principles. Finally, in respect of further improving work-life balance, the DG has defined and applies an **RTD Etiquette for meetings and emails**.

In view of supporting staff in excelling at their roles and enable DG RTD to achieve its strategic objectives, efforts were focused on recruiting highly skilled, professional, and motivated individuals. This included fostering **strong interest in vacancies** and ensuring **efficient talent management** like prioritisation of recruitments of successful contract agent colleagues of internal competitions as well as the promotion of mobility within the DG but also between the DG and Executive Agencies. The **onboarding of newcomers** has been strengthened through a revised [Welcome Pack](#) and an updated [Newcomers section](#) on the RTD intranet. **Regular welcome sessions** are being organised including **dedicated exchanges with the Director-General**.

With regard to the mental and physical wellbeing of staff and as DG RTD is committed to be a **harassment-free workplace** we have worked on strengthening awareness raising about procedures and contact points (through the [RTD Intranet](#)) but also through a dedicated **all-staff meeting with the Chief Confidential Counsellor**.

2024 marked a significant milestone in fostering open communication and collaboration across the DG. We **introduced initiatives** for two-way feedback between staff and senior management, ensuring that **staff** are heard, valued, and acted upon, thereby fostering a culture of empowerment. This was complemented by numerous initiatives, including **all-staff meetings, regular extended Directors' meetings, dedicated library talks, and interactive brainstorming sessions with the Director-General** to address key matters.

The percentage of **female representation in middle management** in the DG increased by the end of 2024 to 47,4%. Although the total number of middle management positions has been further reduced due to the elimination of a few units, DG RTD has managed to meet the (revised) target set in 2023 and have four female first appointments.

In the context of the appraisal exercise the HR Correspondent raises awareness to managers to make sure that **objectives and training plan** are adequately discussed and defined.

3.2. Digital transformation and information management

The Common IT Service Department supplies the IT tools under the eGrants suite to a total of 62 programmes (including Horizon 2020 and Horizon Europe) for which grants are managed seamlessly with common fully electronic workflows from call management to audit and reporting.

Corporate digital strategy

Since 2023, the Directorate-General for Research and Innovation (DG RTD) has established an IT Steering Board, chaired by one of its Deputy Director-Generals. The board's primary role is to ensure that all current, developing, and future IT systems within the DG adhere to the European Commission's IT security policy and corporate standards, as set by the Commission's IT and Cyber-Security Board (ITCB).

On September 1, 2024, DG RTD appointed a Digital Transformation Officer (DTO) to act as an adviser to the RTD IT Board. Recognising the importance of digital transformation and its impact on the workplace, DG RTD created an informal "Digital Transformation Group" led by the DTO. This group includes members from the Common Implementation Centre (CIC) IT Unit, the Efficient Office Unit, the Common Policy Centre, the Interinstitutional Unit, and the Human Resources Correspondent (HRC) team. Their main task was to develop DG RTD's Digital Transformation Roadmap 2025.

The Digital Transformation Roadmap 2025 was primarily formulated in response to the related DG DIGIT Survey. A detailed note outlining the roadmap was presented to the DG RTD Directors in early 2025 and was officially approved by the Director-General. The roadmap outlines various initiatives aligned with the Digital Strategy objectives, including a Digital Awareness Campaign, a Cybersecurity Roadshow, and the formation of a multidisciplinary team to ensure digital readiness in EU policymaking. Additionally, since DG RTD hosts the CIC, the roadmap features several corporate projects like the launch of eGrants 2.0, a revamp of the Funding & Tenders Portal, and the Client Centricity Project.

Data protection

Implementing the Commission's Data Protection Action Plan:

- the senior and middle management were reminded of the target set in the Strategic Plan of having, by the end of 2024, 100% of the staff trained on data protection; statistics were updated with the training needs per organisational entity and solutions were provided for reaching the target set in the Strategic Plan (including the organisation and delivery of four training sessions for newcomers and of four dedicated trainings to six units);
- the personal data processing records concerning the independent experts' registration, selection and management; and the grants and prizes award and management were updated;

- data processing records were drafted for: the internal service providers' Business Management System; Domain Specific Facts; the Programme Committee Members and National Contact Points; and EU Funding & Tenders Portal user profile;
- the lawful exercise of their rights by the data subjects were ensured, in particular by timely answering their requests and complaints.

The Common Legal Support Service continued to advise and assist the operational controllers to fully comply with their data protection obligations, including the elimination of obsolete personal data outside the corporate IT tools.

Data Assets

The main developments on data collection and transformation from the CIC are:

Eleven updates of the eGrants Universe and the eGrants DataStore have been released in 2024. For the eGrants Universe, new objects and new classes about Amendments data, IKAA JU Partner, IKAA Partnership, ABAC posting criteria, full list of proposal declarations, updated country groups, new project installation infrastructure objects, researcher mobility information, ethics incidence, ethics category, communication activities for CR & PR (Continuous Reporting and Periodic Reporting), ERCEA scientific reports assessment, surveys & awards and Proof of Concept (POC) questionnaire etc. were included.

For the eGrants DataStore, new data about amendments, infrastructure (CR and PR), researchers (CR & PR), Secondment data at Continuous Reporting level for Researcher Mobility-Cofund Action, researcher infrastructure, key factors impeding progress to impact on CR & PR, JU Contributions at Participants level (at GAP level), details of result questionnaire, Mobility of the Volunteers for the European Solidarity Corps/ Solidarity domain, Public Portfolios of Proposals defined in CORTEX, proposal & evaluation tables from SEP DataStore, ERCEA POC questionnaire, ethics and applicants tables, etc.

Four specific non-Research & Innovation dashboards covering updated versions of the EU4HEALTH financial overview for internal users, the Digital Europe programme for the Digital Europe Implementation Group (Programme Committee Members, CNECT and HaDEA staff) and the DIGITAL country profile and projects profile public dashboards for DG CNECT have been released.

Two management dashboards were also released during this period: the GPSB dashboard covering the eGrants follow up and addressing the needs of the GPSB, and the "Programme & Entity Benchmark" dashboard.

3.3. Sound environmental management

Particular attention is given by DG RTD's to its efforts and achievements in reducing its environmental impact, focusing on areas such as staff business trips, building operations, staff awareness, biodiversity, and procurement. Key accomplishments include a successful reduction of CO2 emissions by over 50% for staff missions compared to a 2019 baseline, and a 50% budget reduction in experts' travel to limit emissions. DG RTD uses a dedicated tool for monitoring the CO2 footprint of staff travels and is continuously improving its ability to track environmental impacts at the service level.

To further reduce its carbon footprint, DG RTD participates in the OIB BEST initiative by closing its buildings during designated periods for energy savings and promotes sustainable commuting and circular economy practices among staff. Efforts to enhance biodiversity include installing plant pots and rooftop greenery, paired with educational initiatives like a knowledge talk on biodiversity.

Internally, the communication team collaborates with the RTD EMAS representative to raise awareness through various channels, including intranet articles and newsletters. Additionally, DG RTD integrates Green Public Procurement (GPP) principles where possible, particularly in event organization, requiring environmental standards and using GPP criteria in award decisions.

For catering services, DG RTD mandates the use of non-disposable or recyclable items and applies GPP criteria in competitive scenarios. Electronic tools are extensively used in public procurement, minimizing paper usage and promoting efficiency. Environmental considerations are incorporated into tender specifications, advocating for virtual meetings and reduced travel. These efforts align with the European Commission's guidelines for sustainable meetings and events.

3.4. Examples of economy and efficiency

Successful Implementation of EIC under Indirect Management

DG RTD oversaw the transition of the European Innovation Council (EIC) Fund to indirect management, starting January 1, 2024. This involved a temporary transfer of the Commission's shares in the Fund to the European Investment Bank (EIB). Despite the transition, the EIC Fund continued its robust investment activities, achieving over 200 investment decisions by June 2024. Moreover, **each Euro invested by the EIC attracted approximately 3.8 Euros from other investors**, solidifying its status as Europe's largest deep tech investor. The high number of applications (around 1000) for the Pathfinder and Accelerator calls highlights the EIC's strong appeal and its vital role in fostering innovation.

Introduction of the lump sums and unit costs

DG RTD continued the rollout of simplified cost options such as **lump sums and unit costs** in Horizon Europe. The DG launched a further significant wave of lump sum funding in the work programmes for 2024, accounting for 27% of the total call budget. The introduction of the optional unit costs for personnel was announced by Commissioner Ivanova during the RTD Days 2024 and successfully launched in May 2024. It is now available to the beneficiaries. To enable this, we updated the Horizon Europe work programme and the corporate MGA, as well as related business procedures and IT developments.