



European  
Commission

# Management Plan 2022

DG RESEARCH AND INNOVATION

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## INTRODUCTION



**The mission of Directorate General for Research & Innovation** is to design and implement R&I policies and programmes in collaboration with Member States, international partners, stakeholders and citizens. These policies and programmes, supported by investment and relevant regulation, **deliver new knowledge and game-changing innovation for the green and digital twin transformation.**

We aim to have a high scientific, technological and societal impact, built on scientific evidence and strong input from citizens. The DG operates in an ethically robust, effective and efficient manner and keeps a strong focus on the European added value.



Faced with long-term social and economic effects of the global pandemic, our **vision** remains unchanged: **a sustainable, safe, fair and prosperous future for the people and the planet**, based on solidarity and respect for common European values.

In 2022, the DG will contribute to the **six headline ambitions for Europe** and play an important role in strengthening modern, high performing and sustainable European Commission.

The DG will pursue the implementation of **Horizon Europe**. The new European Framework Programme for Research and Innovation is considered the most ambitious R&I programme ever introduced by the European Union. In 2022, DG Research and Innovation will continue driving, facilitating and co-creating the **Horizon Europe strategic plan and the work programmes** within the Commission and with external stakeholders.

In the course of this year, DG R&I will focus on the launch and implementation of the **EU Missions under Horizon Europe**. They are designed to solve major societal challenges: fighting cancer, adapting societies to climate change, protecting oceans, greening cities and ensuring healthy soils and food. Citizens' engagement in the EU Missions is critical for their success.

The implementation of the **new wave of the European Partnerships** - in cooperation with Member States, Associated Countries, private sector, academia and a broad range of stakeholders - will help to modernise the European industry, to boost competitiveness of the Union and to speed-up the deployment of scientific knowledge and new technologies to address global challenges.

**Increased synergies** between research and innovation policies and other European national and regional programmes, instruments and actions will maximise the impact of Horizon Europe.

The renewed **European Research Area (ERA)** will remain a key priority to enhance R&I investments in Member States and to support necessary reforms of the local R&I ecosystems. The new ERA will boost competitiveness and decrease the innovation gap in the EU as well as hasten brain circulation and create new career opportunities for researchers.

The DG will continue its efforts to overcome the health, economic and social consequences of the COVID-19 pandemic. **The NextGenerationEU recovery package** has a key role in funding vital research in health, resilience, green and digital areas.



**We followed the science.**

We delivered to Europe. We delivered to the world.  
We did it the right way, because we did it the European way.

**President Ursula von der Leyen**  
**State of the Union 2021**

The **European Health Emergency Preparedness and Response Authority (HERA)**, with a significant science and innovation component, will strengthen the European Health Union and improve the EU's preparedness to serious cross-border health threats.

An **external communication strategy** will accompany policy development with its climax during the **European Research and Innovation Days**. The 2022 edition of the event will gather stakeholders, citizens and policymakers to shape the R&I landscape, working across policies, spurring innovation and triggering investments. The previous editions of this milestone event have shown that digital events offer the opportunity to reach out to more people and provide an extended geographical coverage. To maintain the interest and engagement of this vast base of stakeholders and citizens, a new **Research and Innovation community platform** will debut in 2022. This platform aspires to become a one-stop shop for events and activities around EU Research and Innovation. Events such as the European Research and Innovation Days and other milestone events will be announced and hosted on this platform, while its users will be offered the opportunity to network, engage, get information and share ideas.

This Management Plan defines the most important output of DG R&I for 2022 to deliver on the objectives set in the Strategic Plan 2020-2024. It follows the structure of the Strategic Plan and reflects the priority actions identified in the Commission work programme for 2022.

# THE R&I POLICY FOR ACCELERATING TRANSITIONS IN EUROPE

## DG R&I SPECIFIC OBJECTIVES TO THE COMMISSION'S HEADLINE AMBITIONS

### 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 Common 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

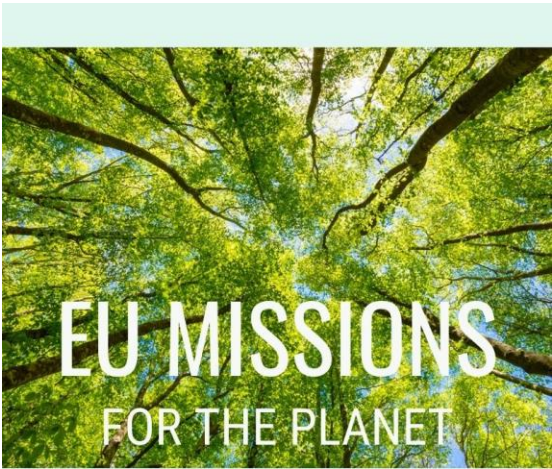
**PART 1. Delivering on the Commission’s priorities: main output for the year**



**General objective 1: A EUROPEAN GREEN DEAL**

Climate change is one of the biggest challenges of our times and the EU Member States committed to turning Europe into the first climate-neutral continent by 2050.

The **European Green Deal** brings an ambitious action plan that will create new opportunities for innovation, investments and jobs.

**Research and innovation are key enablers of the green transition**, focused on



 <p>Adaptation to Climate Change: at least 150 European regions and communities climate resilient by 2030</p>	 <p>100 Climate-Neutral and Smart Cities by 2030</p>
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 <p>Restore our Ocean and Waters by 2030</p>	 <p>100 living labs and lighthouses towards healthy soils by 2030</p>
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driving long-term systemic shifts. To implement the **EU Green Deal Strategy**, DG R&I will launch **EU Missions** and the **new generation of European Partnerships**.

Four out of five EU Missions will deliver on climate neutrality. In 2022, the implementation of the ‘green’ Missions will be in full swing.

- The Mission on **Adaptation to Climate Change** will engage a first cohort of regions and communities and establish key structures. The Mission Board will be renewed; actions for the Work Programme 2023-24 will be identified.

- The Mission on **Restoring our Ocean and Waters** will establish basin-scale restoration lighthouses. The R&I solutions will be established for the three Mission objectives - restoring ecosystems and biodiversity, eliminating pollution, making the blue economy carbon-neutral and circular.

- The Mission on **100 Climate-Neutral and Smart cities** will select cities participating in the Mission, set up a network of contacts in Member States, renew the Mission Board and define actions for the Work Programme 2023-24.

- **A Soil Deal for Europe** will boost communication and stakeholders’ engagement, conclude an agreement with the JRC to advance soil monitoring and create a mission coordination platform. The Mission Board will be renewed.

The **European Partnerships** address complex challenges such as accelerating the transitions towards a society and an economy that are climate neutral and circular. They are impact driven, by deploying a broad range of R&I activities and creating critical scales of investment as well as by enhancing synergies between programmes. Further possible synergies between the Partnerships and the EU Missions under Horizon Europe will be explored.

In line with the EU biodiversity strategy for 2030<sup>1</sup>, DG R&I will develop **a long-term strategic research agenda for biodiversity**, integrated in Horizon Europe to support the implementation of biodiversity commitments.

The DG will support the deployment of **a sustainable European Bioeconomy**. A Report on the state of implementation of the EU Bioeconomy Strategy will analyse the progress made so far and develop forward-looking ideas. The DG will continue developing the **Food 2030** initiative as well, building on the UN Food Systems Summit outcomes and orientations.

**Greening Transport:** impact of the non-CO<sub>2</sub> aviation emissions to climate and the environment to link better upcoming Horizon Europe aviation R&I actions to ‘Fit for 55’ aviation policies and take informed decisions at European and International level.

To support the New Industrial Strategy, in 2022 DG R&I will deliver **two Common industrial technology roadmaps**: one for low-carbon technologies for energy-intensive industries and the other for circular industrial technologies.

The roadmaps will be jointly developed with Member States and stakeholders to provide evidence-based policy conclusions to support the uptake of new industrial technologies.

**PARTNERSHIPS FOR THE PLANET**

**EXAMPLES OF INSTITUTIONALISED PARTNERSHIPS**

- Clean Hydrogen Partnership
- Europe’s Rail Joint Undertaking
- Clean Aviation Partnership
- Circular Bio-based Europe Joint Undertaking

**EXAMPLES OF CO-PROGRAMMED & CO-FUNDED PARTNERSHIPS**

- Towards zero emission road transport
- Connected, Cooperative and Automated Mobility
- Batteries European Partnership
- Zero Emission Waterborne Transport
- Clean Steel
- Process 4 Planet
- Build 4 People
- Clean Energy Transition
- Driving Urban Transitions to Sustainable Future
- Water 4 All
- Rescuing biodiversity to safeguard life on Earth

<sup>1</sup> COM(2020)380final, in 3.3.4 Improving knowledge, education and skills: [“The future Horizon Europe programme will include a long-term strategic research agenda for biodiversity”]





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### FOCUS ON BIODIVERSITY

DG Research & Innovation will continue representing the European Commission in the Intergovernmental Panel on Climate Change (IPCC) and in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The cooperation aims to coordinate and accelerate the international efforts for climate.

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### Partnership, and the **European Hydrogen Alliance**.

DG R&I will contribute to a **Communication on solar energy** and establishing a competitive European solar technology supply chain, within a global approach on developing renewable energy. Finally, in 2022 the Euratom partnership **EUROfusion** will be launched to contribute to the success of ITER as it moves closer to the exploitation phase.

**External communication** will actively promote the EU Missions and their contributions to the EC priorities, among which Green Deal is a strong pillar. The DG will be in the lead for the organization of the **New European Bauhaus Festival**, bringing the Green Deal principles closer to citizens and showing how it positively affects their lives.

DG R&I will also support the promotion of EU Partnerships, including their synergies with the EU Missions. The DG Research and Innovation contribution to the Commission's headline ambition 'European Green Deal' is reflected by the Research and Innovation actions under three specific objectives included to the performance tables in the annexes:

- 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

DG R&I will contribute to the **Chemicals Strategy for Sustainability** with the R&I component for defining criteria for safe-and-sustainable-by-design chemicals and materials.

The DG will lead the preparations for the revamped **SET Plan**.

In the Energy field, the hydrogen strategy also foresees the implementation of the **ERA Pilot on Green Hydrogen** and the reinforcement of synergies among the Pilot, the **Clean Hydrogen**

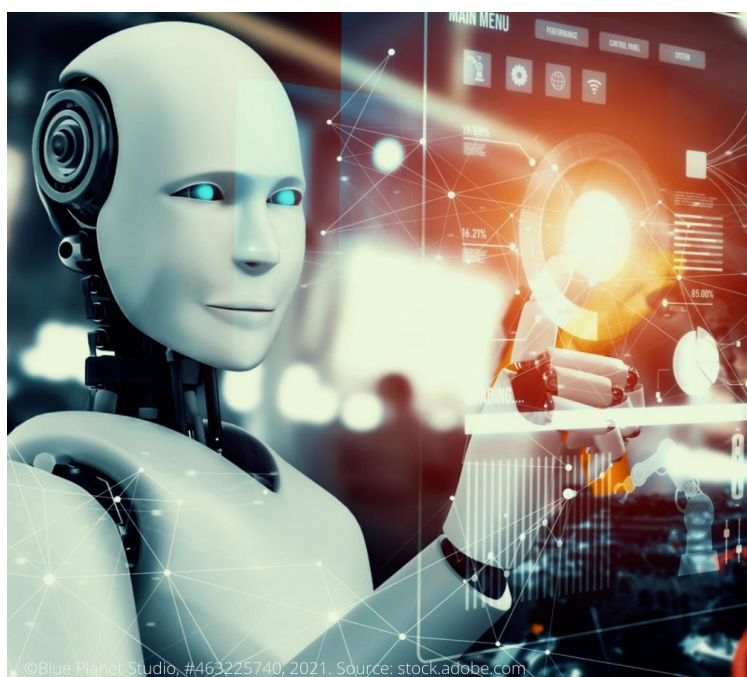
- Specific objective 1.3: Co-creation of Horizon Europe and its missions and partnerships increases awareness of the key role of research and innovation for achieving climate neutrality.

## **General objective 2: A EUROPE FIT FOR THE DIGITAL AGE**

Horizon Europe with its modern instruments and a significant budget of EUR 95.5 bn aims to **hasten the digital transition of the continent** and to accelerate the international efforts in this area.

The programme is interlinked with the key European and regional programmes, instruments and actions in its financial, administrative and governance dimension. **The multi-layered synergies** - even strengthened in 2022 - will maximise the impact and targeted results.

This year, DG R&I will continue to further support **innovation** to speed-up Europe's recovery and long-term growth, based on a fair economic growth of all EU regions, including rural areas. This work aims to analyse the gaps that still exist in EU's support to innovators and will be informed by the latest results of the **European and Regional Innovation Scoreboards and Industrial R&D Investment Scoreboard**.



The developments on **Artificial Intelligence (AI)** and full use of its potential remain among the key priorities. This year, the DG will identify the opportunities to use AI for the benefit of the EU Missions, for example in risk assessment, more accurate predictions, precision of monitoring systems, validation methods and data security.

DG R&I will contribute to the **Joint Earth System Science Initiative** through a Horizon Europe coordinated call with the European Space Agency (ESA). The DG will also continue supporting the recently established **Knowledge Centre on Earth Observation**, managed in cooperation with the Joint Research Centre.

DG R&I will Co-Chair the **Group on Earth Observation (GEO)** and will pursue in 2022 its strategic cooperation to better connect government and academic institutions, data providers, businesses and citizens.

To ensure that Europe remains at the frontier of science and at the forefront of new waves of innovation, **the European Research Area** will be further developed. In 2022, the DG will set-up the permanent ERA Forum and put in place an ERA Scoreboard. The online ERA policy platform, announced in the Pact for Research and Innovation in Europe, will be operational. DG R&I will also involve Stakeholders in the new ERA governance.

The DG will continue its involvement in dialogue with Member States to enhance more effective R&I investments, the necessary reforms and flexible use of the **Horizon Policy Support Facility 2.0**.

As part of the implementation of **the European Strategy for Universities and the ERA policy agenda**, a European excellence initiative action plan will support the successful transformation of universities and their increased collaboration within local ecosystems.



The DG will support the implementation of the **ERA4You initiative** focused on boosting mobility of talents from academia to business and vice-versa and supporting new careers of knowledge brokers, investor's associates, technology transfer specialists or research infrastructure operators. Moreover, the DG will launch the **ERA Hubs pilot** to maximise value from knowledge creation, circulation and use and to attract and retain talents more effectively.

#### SUPPORT FOR RESEARCH CAREERS

The legislative initiative for 'A European framework to attract and retain R&I talents in Europe' will address key challenges faced by researchers, for example precarious working conditions or skills mismatches that hamper mobility and a full cycle of knowledge production, circulation and valorisation.

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Several other actions have been foreseen to support careers of researchers. The EURAXESS portal will be transformed into the **ERA Talent Platform** with improved structure and governance.

The '**European framework to attract and retain R&I talents in Europe**' will build on action 8 in the **ERA communication** and on the Council Conclusions on research careers

adopted in May 2021 and which invited the Commission to make proposals towards a comprehensive framework for research careers addressing all challenges beyond values and principles and broadening its focus beyond academia. The framework will take account of the ongoing analysis by the Council on the **Charter and Code for researchers**, and address challenges faced by researchers like precarious working conditions or skills mismatches that hamper mobility and a full cycle of knowledge production, circulation and valorisation.

In 2022, DG R&I will act as a facilitator for the creation of an alliance/coalition of European research funders and research performers who agree on reforming the system for assessing the quality, performance and impact of research, researchers and institutions. The coalition will establish an implementation plan, including monitoring mechanisms, for rolling-out reforms, in order to translate commitments to commonly agreed objectives, principles and actions into effective changes

DG R&I together with the Member States, the associated countries and the European Open Science Cloud (EOSC) European partnership will develop, deploy and test a joint **Open Science policy framework** and **monitoring platform**, which should allow to benchmark investments, policies, digital research outputs, open science skills and infrastructure capacities. The Commission will renew in 2022 the coordination structure supporting the EOSC Steering Board and put in place a long-term mechanism to coordinate and regularly update the ERA Forum, accelerating alignment of European and national Open Science policies, investments and initiatives.

Moreover, DG R&I will assess the opportunity and requirements for establishing a **European cultural heritage collaborative space**, comprising an innovative digital platform that will revolutionise the societal value creation from European cultural heritage.

DG R&I will continue to promote the **valorisation of science** towards policy making and the high standards of research ethics and integrity. The study on 'European



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### OPEN ACCESS TO KNOWLEDGE

The DG will develop a multidisciplinary, cloud-based and centrally managed open repository for research digital objects from Horizon Europe projects. The platform will offer data services at no cost to the beneficiaries in the spirit of openness and equal access to knowledge, while securing EU sovereignty of the EU-funded research data.

Research Data Landscape' will analyse production and consumption of research data per disciplines and countries, practices of depositing, costs and readiness of repositories to implement FAIR Data services. The final report will be delivered in summer 2022 to serve as a baseline for future **European Open Science Cloud (EOSC) impact assessment**.

After 20 years of existence, **European Strategy Forum on Research Infrastructures (ESFRI)** must take stock of its achievements and look into its future role to consolidate the research infrastructure landscape in Europe and to engage new stakeholders and user communities. **The renewal of the ESFRI's mandate** will take place in 2022, which will be confirmed by Council conclusions in the second half of the year. With 22 existing European Research Infrastructure Consortia (ERICs) and the new ones to be established upon the Member States' request, an **assessment of the implementation of the ERIC Regulation** is necessary.

**Regulatory sandboxes** are a means to test innovative technologies in real-world environments, provided that legislation is **innovation-friendly and contains experimentation clauses**. Efforts will continue in 2022 to embody this approach in the EU missions and legislation based on lessons learnt from the EU and the national experiences.

DG R&I is working towards a copyright and data legislative and regulatory framework fit for the needs of research and researchers. The DG will, amongst other actions, conduct several studies to identify: i) legislative and regulatory barriers and challenges in accessing and reusing publicly funded research results/publications and data for research purposes; ii) potential impacts of existing/upcoming legislation on research. Possible legislative and non-legislative measures (e.g. guidance) to improve the current EU Copyright Law and data legislative and regulatory frameworks will be considered, in collaboration with others DGs who are leading the relevant non-research files

DG R&I is planning **several external communication actions** to raise awareness, engage and empower stakeholders and citizens within the context of this headline ambition. Highlights for 2022 will include the promotion of several new ERA initiatives, including ERA4You. The new ERA Talent Platform and the European Union Contest for Young Scientist provide ample opportunity to join forces with corporate communication actions foreseen in the context of the European Year of Youth (2022).

The DG's contribution to the Commission's headline ambition 'Europe fit for Digital Age' is reflected by the R&I actions under three following specific objectives included to performance tables in the annexes:

- 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**

Strengthening national and European R&I ecosystems is crucial to ensure a quick, inclusive and sustainable recovery of the EU from the COVID-19 crisis and to support a sustainable and inclusive growth.

The **2022 Science, Research and Innovation Performance report** aims to be a major contribution to transformative Research & Innovation policies while the 2022 edition of the **European Innovation Scoreboard** will provide a comparative analysis of innovation performance in the European Union and beyond.



As part of **a renewed European Semester logic**, DG R&I will contribute to the monitoring of the implementation of the **Recovery and Resilience Plans** by the Member States and continue being involved in the definition of potential **R&I Country-Specific Recommendations**, aimed at addressing persistent bottlenecks in terms of national investments and reforms. The regional dimension of stronger national R&I ecosystems will be promoted through the revamped **Knowledge Exchange Platform 2.0**, which is one of the core activities under the **Joint Action Plan** with the Committee of the Regions.

Support to Member States will also be provided through a set of activities to **strengthen the synergies across EU funding programmes**, notably Cohesion Policy Programming and Horizon Europe, as well as with national and regional schemes. The already established

**Seal of Excellence Community of Practice** will continue its activities and contribute to strengthen these synergies.

Following the review, a number of revised State aid rules will be in place by early 2022. DG R&I will continue to contribute to the ongoing **revision of EU State aid rules**, including the revision of the **General Block Exemption Regulation**. The DG will communicate to granting authorities, stakeholders and European Partnerships, **how to make the best use of revised State-aid rules** to boost R&I investments and enhance synergies between Union programmes.

**The Horizon Europe Dissemination and Exploitation strategy** will support the EU Missions and its stakeholders through the creation of portfolios of Horizon's results relevant for the Missions. Furthermore, both the researchers and the results delivered by their projects will be supported through specific services (Horizon Results Platform, Horizon Results Booster, networking solutions) to accelerate the exploitation of the R&I results.

Due to the impact-driven approach of the Missions, there is a clear need to streamline and embed **knowledge valorisation** as the process turning research results and scientific knowledge into sustainable solutions with economic value and societal benefit.

The **European Guiding Principles for knowledge valorisation** will bring the solution to this pressing demand with the **Code of Practice for the smart use of Intellectual Property (IP)** and the **Code of Practice for researchers on standardisation**. The former addresses the challenges in managing intellectual property in open R&I systems and raise awareness on IP management among universities, research organisations and businesses in the international context; the latter describes the use of standards as a knowledge valorisation channel.



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We will present a new **European Chips Act**. We need to link together our world-class research, design and testing capacities. We need to coordinate EU and national investment along the value chain.

**President Ursula von der Leyen**  
**State of the Union 2021**

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A **mapping of the knowledge valorisation** in the EU Member States and Associated Countries will be done, with a focus on societal engagement and industry-academia relations.

The DG will work with stakeholders implementing **Industry 5.0<sup>2</sup>** that sets out a vision for a more human-centric, sustainable and resilient European industry, capable of realising its

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<sup>2</sup> Policy brief on Industry 5.0 [https://ec.europa.eu/info/publications/industry-50\\_en](https://ec.europa.eu/info/publications/industry-50_en)

essential role in and contribution to the transition towards more digitally advanced, inclusive and regenerative economy and society. The first-ever **Industry 5.0 award** will recognise projects which incorporate these principles to empower businesses with a renewed societal role.

DG R&I will contribute to develop actions to substitute pre-identified critical raw materials and products to avoid potential dependencies on other global players and the risks of bottlenecks in the supply chain. This is critical for industry's green and digital transformation and the EU competitiveness in such areas as Artificial Intelligence, Big Data, Cloud, Cybersecurity, Industrial Biotech, Robotics or Microelectronics.

DG R&I supports the development of **dual-use technologies** and the enhancement of cross-fertilization between civil, defence and space industries.

Synergies between Horizon Europe and the European Defence Fund are essential and to develop an innovation incubator for dual-use breakthrough technologies.



In 2022, DG R&I will implement the **European Partnership on Metrology**, which provides the tools for a closer engagement with industry and metrology institutes. The aim is to achieve a greater impact and to ensure that the results are used in all relevant areas where technological development is linked with metrology, such as digitalisation, Artificial Intelligence, energy, health and circular economy.

A **Memorandum of Understanding with Eureka** is expected to be signed in 2022 to serve as the base for the future collaboration between the European Commission and Eureka. It will set the overall principles and areas of collaboration between the Commission and Eureka for the coming years, including the European Partnership on Innovative SMEs. The DG will launch a cluster of R&I initiatives to develop a collaborative platform for innovation that will harness Europe's **cultural heritage** and **cultural and creative industries**, as an engine of sustainable and green innovation, economic growth and employment.



The DG will publish its second edition of the **Transitions Performance Index**, a composite indicator that provides a transparent, simple and reliable tool to measure progress towards a society focusing on resilience, inclusiveness and sustainability.

DG R&I will continue promoting the initiatives under the priority 'An economy that works for the people', **through many external communication activities** and supporting relevant policy initiatives. Among others, the DG will particularly disseminate the findings from the European Innovation Scoreboard and the report 'Science, Research and Innovation Performance of the EU 2022'. Moreover, in 2022, DG R&I will re-launch the Horizon Impact Award, a successful initiative that gives visibility to R&I projects bringing concrete solutions to today's challenges. Furthermore, DG R&I will launch the first Industry 5.0 Award, rewarding the most sustainable, resilient and human-centric industries in the EU.

The DG R&I contribution to the Commission's headline ambition 'An economy that works for the people' is reflected by the R&I actions under the following specific objective included to the performance tables in the annexes:

- 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**

DG R&I will coordinate and monitor the delivery of the EU's **Global Approach to Research and Innovation** across the Commission and with the Member States for a 'Stronger Europe in the World'.



The DG will launch a multilateral dialogue with partner countries at the conference hosted by the French Presidency in March 2022 and agree a common basis for international engagement, consisting of agreed values, principles and framework conditions. Coordination with Member States will be deepened in the **ERA Forum**.

#### **HORIZON EUROPE GOES GLOBAL**

In 2022, the DG will continue promoting association to Horizon Europe. The programme allows for association of the countries of the European Economic Area (EEA) and the European Neighbourhood Policy (ENP), the Enlargement countries and third countries with a strong science, technology and innovation profile.

Association is the closest form of cooperation in Science, Technology and Innovation (STI) with countries outside the European Union. Horizon Europe allows for association of countries of the European Economic Area (EEA), the Enlargement countries, countries of the European Neighbourhood Policy (ENP), and other like-minded third countries with a strong STI profile, not necessarily located in the geographic proximity of the EU.

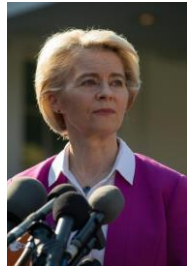
For most countries associated to Horizon 2020, the association to Horizon Europe became effective in 2021. For countries where negotiations were initiated but not concluded in 2021, and/or where internal procedures of the EU or the country could not be completed before the end of 2021 (such as the Faroe Islands, Tunisia and Morocco), the association agreements are expected to be effective in 2022, with a retroactive application as of 1 January 2021.

In the course of 2022, informal discussions on what a possible association to Horizon Europe would mean will continue with highly industrialized countries such as Australia, New Zealand, Japan, South Korea and Singapore, with a view to a framing a policy decision on their side whether to formally request association.

**Exploratory talks will continue with newcomer countries**, which formally requested association to Horizon Europe (such as Canada) and depending on progress in such talks, the Commission will progressively recommend to the Council the opening of negotiations.

**The Western Balkans (WB) Agenda** for Research, Innovation, Education, Culture, Youth and Sports is the fruit of a co-creation and large consultative exercise. It aims at contributing to the economic development, regional cooperation, and strengthening the innovation capacity of the Western Balkans partners. Under this agenda, the role of the DGs under Commissioner Gabriel’s portfolio will be to boost human capital development, nurture a knowledge-based society, reform national education, promote R&I eco-systems, and

support the green transition and digital transformation in the region. In 2022, the focus will be on implementing the Western Balkans Agenda actions on Research, Innovation, Education, Culture, Youth and Sports. It will include the continuation of the Western Balkans Steering Platforms



‘With the US we will develop our new agenda for global change – from the new **Trade and Technology Council** to health security and sustainability. The EU and the US will always be stronger – together’.

**President Ursula von der Leyen  
State of the Union 2021**

for Research and Innovation, and Education and Training as valuable instruments of policy dialogue with the region supporting the participation of the Western Balkans in Horizon Europe and exploring synergies with other initiatives. To increase participation of the Western Balkans in Horizon Europe a dedicated social media campaign targeting the six countries will be continued in 2023.

Cooperation with strategic partners around the world will continue in multilateral R&I platforms under Horizon Europe Work Programmes, Partnerships and Missions and through the different **Policy Dialogues**. Deepened cooperation will be pursued in line with the Union's external priorities, including the **Indo-Pacific and Global Gateway strategies**.

DG R&I will re-invigorate **R&I cooperation with the United States** towards a renewed Transatlantic Partnership in line with the 2021 EU-US Summit outcomes, including through both the Trade and Technology Council and the Energy Council. New and increased areas for further dialogue and actions will be identified.

DG R&I aims to deliver the **EU-China Joint Roadmap for Future Science, Technology and Innovation Cooperation**, in line with the 2019 EU China Strategy, for a level playing field and reciprocity in innovation. The DG will focus on: continued dialogue to reach agreement on framework conditions still outstanding, implementation of framework conditions already agreed, launch the EU-China Flagship on Climate Change and Biodiversity and implementation of the EU-China R&I Flagship on Food and Agriculture cooperation, including by agreeing on an Administrative Arrangement for co-funding of Chinese participants in Horizon Europe.

In line with the Comprehensive Strategy for Africa, the **EU-African Union Joint Innovation Agenda** will be launched at the EU-AU Summit, aiming at transforming innovative capacities and achievements of EU and AU researchers, private and public entities for sustainable growth and jobs, and developing a long-term, sustainable and operational EU-AU R&I cooperation model. The EU Africa Union joint Innovation Agenda will be supported by producing audio-visual material for the EU-Africa summit in February 2022.

DG R&I will contribute to the development of knowledge economies in Africa via **the Launch of the EU-Africa Global Health – EDCTP3 Joint Undertaking** (follow-up to EDCTP) and the first calls for proposals. The efficient coordination of EU with Member States in terms of COVID-19 R&I activities and linking with international initiatives will reinforce the EU global role regarding the fight against the virus.

DG R&I will step up **Euro-Mediterranean cooperation** with the endorsement of the new Union for the Mediterranean R&I Agenda, in line with the Renewed Partnership with the Southern Neighbourhood Communication, including three R&I roadmaps on health, renewable energy and climate change (June 2022).

We will Increase **cooperation with Latin America** through implementation of the **EU-CELAC Strategic Roadmap for Research and Innovation** in four cooperation pillars: mobility of researchers, cooperation of research infrastructures, global challenges and innovation. Strategic bilateral cooperation will continue with key partner countries: Argentina, Brazil, Chile and Mexico.



*EU cooperation with Western Balkans offers unparalleled opportunities. The Agenda for the Western Balkans will open these opportunities to students, researchers, innovators and cultural operators so that they access new markets, become more competitive and build sustainable prosperity. It's a positive and forward-looking vision for all.*

**Mariya Gabriel** EU Commissioner for Innovation, Research, Culture, Education and Youth

In 2022, DG R&I will also be working on the implementation of Europe’s strategy for international cooperation in a changing world by working with international partners to set a new ambition for the **All Atlantic Ocean research alliance**, from the Arctic to the Antarctic. The DG will continue the cooperation with strategic international partners on research and innovation related to the bioeconomy through the **International Bioeconomy Forum (IBF)**.

**The International Rare Disease Research Consortium (IRDiRC)**, co-established in 2011 by the Commission and US National Institutes of Health (NIH), has grown to a recognised global initiative. To celebrate its 10-year anniversary and achievements, DG R&I is preparing a communication action plan which foresees the production of audiovisual material and a media campaign in 2022.

The main focus for communications will be on the implementation of the global approach to R&I and the start of multilateral dialogues. **Communication materials** will be produced to reinforce the objectives of this communications especially to associated countries and non-EU countries to Horizon Europe. Association Agreements with highly industrialised countries including Canada will culminate with press material.

The DG R&I contribution to the Commission’s headline ambition ‘A Stronger Europe in the World’ is reflected by the R&I actions under the following specific objective:

- 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**

European research and innovation put a cornerstone to combat the global COVID-19 pandemic through development of the life-saving vaccines.

In 2022, **R&I will remain an engine of the EU recovery and resilience**. Further progress on rolling-out testing, treatment and prevention methods as well as overcoming the social and economic impact of the pandemic will be among the priorities of Horizon Europe.



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### **SCIENCE FOR MEDICINES**

DG R&I will contribute to the implementation of the Pharmaceutical strategy for Europe. The R&I components will be key for safe, effective, greener and affordable medicines, addressing unmet medical needs ( eg. in antimicrobial resistance or rare diseases), competitiveness and sustainability of the pharmaceutical industry, diversified supply chains and responding to medicines shortages.

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DG Research & Innovation will broadly **contribute to HERA**, the Health Emergency preparedness and Response Authority, and its governance. New evidence and solutions stemming from innovative research will help to address possible future health threats. **A pandemic preparedness partnership** will be set-up, with a concept and strategic R&I agenda to be agreed across the Commission services in 2022.

The DG will continue its involvement in expanding the **European COVID-19 Data Platform** by mobilizing additional genomic sequencing data, integrating other data types such as epidemiological and clinical data, and helping to identify and track new viral variants. We aim to provide comprehensive open data on SARS-CoV-2 and other infectious diseases across scientific, medical, public health and policy domains, linking patient with research data. This will ultimately **improve European readiness for future pandemics**, enhance genomic surveillance and rapid-response capabilities. In support of the EU Intellectual Property Action Plan the **Manifesto for EU Covid-19 research** will be extended in order to improve access to intellectual knowledge assets.

**The implementation of the 1+ Million Genomes Initiative** will progress in 2022 to enable secure cross-border access and sharing of genomic and other health data.

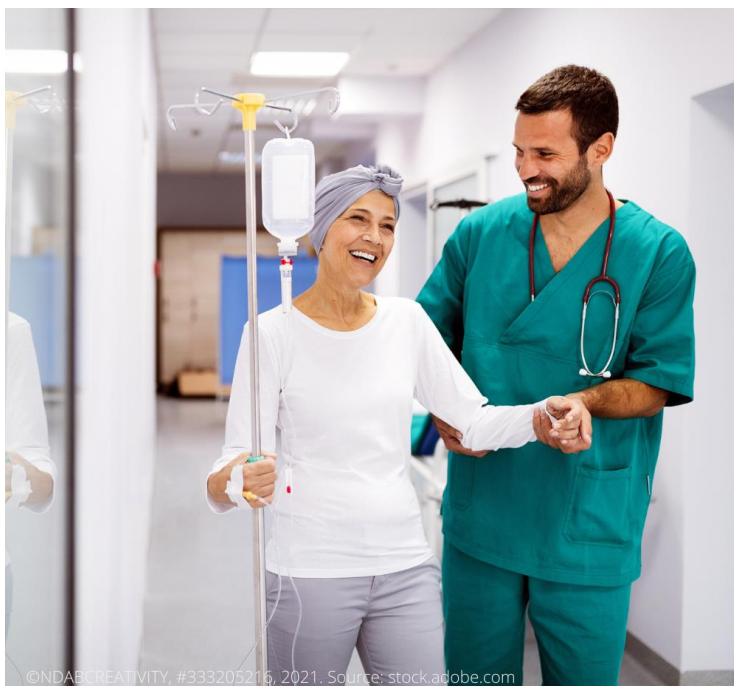
The initiative will be linked with the **European Joint Programme on Rare Diseases (EJP-RD)**, the Solve-RD project supported under Horizon 2020.

**DG R&I will contribute to the European Health Data Space (EHDS)**, which will boost the potential of digital health to provide high-quality healthcare while safeguarding a security of patients' data.

In line with Horizon Europe Research Infrastructures (RI) Work Programme part, a **European platform of Research Infrastructures and services** will be created to mobilise a critical mass to address the rapid needs of research on COVID-19 and other epidemics.

**The new Innovative Health Initiative (IHI) Joint Undertaking** (based on art. 187 of the TFEU) will bring together several health industry sectors to facilitate the creation of new products and services for better prevention, interception, diagnosing, and treatment of diseases. This new partnership will focus on yet unmet public health needs to improve health care systems. In 2022, we'll also finalise the preparation of a **European partnership on transforming healthcare systems**.

The **European Mission on Cancer** will work in synergy with the **EU Beating Cancer Plan**. The mission will set up a platform for the integrated provision at EU level of research infrastructure services to support research on cancer. European citizens will be broadly involved in the various activities of the Mission. **External communication** will particularly promote the Cancer Mission under Horizon Europe, with the objective to communicate towards stakeholders and citizens.



The **EU Mission on cancer** will improve lives of more than 3 mln people by 2030. The Mission will support Member States, regions and communities on cancer control and enhance understanding of cancer, boost prevention, optimise diagnosis and treatment, improve quality of lives of patients and their families and ensure equitable access to care across Europe. It will put citizens in the center of research and innovation.

DG R&I will deliver on the **Social action plan** and develop a strategic R&I agenda for the European future of work. The DG will identify research needs and innovation opportunities through consultation of a wide range of stakeholders, including Member States and social partners **-in the framework of the European Research Area-** and with particular attention for the needs of young people, in the context of the European Year of Youth.

DG R&I will make a significant contribution to the **European Strategy for Universities (ES4U)**, the initiative will be debated at the Ministerial conference on higher education, research and innovation, organised by the French Presidency in January 2022.

**PIANOFORTE** will tackle the issue of radiation protection and cross-cutting aspects related to health (cf. radiotherapy and proton therapy), both of paramount importance for the health of the EU citizens.

Consistent communication initiatives throughout the year will continue supporting this approach and help promote the role of EU Research and Innovation for recovery and resilience.

The DG's contribution to the Commission's headline ambition 'Promoting our European Way of Life' is reflected by the R&I actions under two specific objectives included to the performance tables in the annexes:

- 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**

DG R&I will make a significant contribution to support **citizens' involvement, social inclusion and equalities in Europe**.

During 2022, in each Member State there will be events where citizens debate on sustainable and smart mobility, sustainable food systems, and efficient buildings. The outcome of these events will feed both the Conference on the Future of Europe and an expert-drafted **roadmap for the climate transition**. DG R&I will facilitate the elaboration of the roadmap for the green transition across all EU countries.



### GENDER EQUALITY IN R&I

The COVID-19 pandemic strongly affected female careers in science and innovation. In 2022, DG R&I will launch an Expert Group to deliver a study on the impact of the pandemic and the containment measures put in place at institutional, national and EU levels to address women's professional needs and support gender equality in R&I.

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Along with its yearly flagship event on Research and Innovation, DG R&I will also launch a **new Research and Innovation community platform**, to continue engaging with stakeholders and citizens by providing them access to several events and activities around EU Research and Innovation.

DG R&I is also **co-designing inclusive gender equality plans and policies together with Member States and R&I stakeholders**. Other

activities to support the implementation of the ERA policy agenda on gender equality, in line with the Ljubljana Declaration, include:

- a study on intersectional aspects in R&I
- support R&I organisations to develop gender equality plans (GEPs)
- internal and external capacity building for the integration of a gender dimension in R&I content

The DG's contribution to the Commission's headline ambition 'A New Push For European Democracy' is reflected by the R&I actions under the following specific objective:

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



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

In 2022, DG Research and Innovation will make sure that **the implementation of Horizon Europe** and the **Euratom Research and Training programme** run smoothly and contribute to delivering on EU priorities. The DG will also support the implementation of the newly launched **EU Missions and Partnerships under Horizon Europe**.

The **Common Policy Centre (CPC)** will continue its work as the central hub driving, facilitating and co-creating the strategic plans and the work programmes with all Directorates-General involved in Horizon Europe. The CPC will start in 2022 the **preparatory work of the strategic plan 2025-2027**, based on a gap analysis, stakeholders' consultation, co-design activities with Member States, including through a dedicated broad **foresight exercise**.

The CPC will coordinate the development of the **work programmes** under the Horizon Europe specific programme, with the adoption of an amendment of the 'main' work programme 2021-2022 and the adoption of the 'main' work programme 2023-2024.

The **Common Implementation Centre (CIC)** will ensure that Horizon Europe runs well, based on a solid legal framework. The new legal context of Horizon Europe takes account of the learnings from Horizon 2020, the Annotated Grant Agreement will be finalised together with the horizontal services. The CIC will provide **legal support and advice** for the 2023-24 Horizon Europe Work Programmes to make sure that the calls included in the work programmes are legally sound and implementable. The CIC will also support the ongoing negotiations and adoption of the **Horizon Europe association agreements**.

Beyond the robust legal framework, the CIC will enable **the effective implementation of Horizon Europe**, with particular attention to making Missions a reality. It will define and continuously improve the entire processes of implementation (including IT workflows): from work programme preparation, publication of calls, submission and evaluation of proposals, to the management of grants, monitoring of projects, payments and audit implementations. In 2022, this will include: the inclusion of new entities and programmes (e.g. RELEX DGs, DEFIS, SANTE, EAC, Joint Undertakings etc.) into the Commission's grant management tool 'eGrants', together with the roll-out of updated modules; a more performing and up-to-date IT solution for the management of Experts evaluators and monitors; the progressive transition to cloud solutions and update of security plans.

The CIC will continue to provide **high-quality testing capacities** for future IT developments, as well as client-oriented services such as training, help desk and information. Options will be explored for a more personalised and mobile provision of existing data and services to participants and partners.



The DG will focus in 2022 on **supporting the EU Missions** in delivering on their key outputs and milestones. The CPC will provide effective and efficient **planning, programming and implementation services and tools** to the European Commission services involved in Missions' implementation. The Centre will secure:

- effective operation of Mission Boards;
- development of a toolbox for supporting common approaches with Member States and Associated States;
- development of the indicators and monitoring system;
- setting up of operational guidelines for missions' portfolio management;
- identification of contributions from bottom-up programmes;
- development of common tools for engaging citizens;
- coordination of budget planning and the associated governance mechanisms;
- the analysis, strategy development and sharing of common approaches across the EU Missions.

Following the adoption of all legal acts establishing the first wave of **European Partnerships**, attention will shift in 2022 towards implementation, monitoring and evaluation, and preparing for the launch of a set of co-funded partnerships in the 2023-24 work programme. The Strategic Coordinating Process for partnerships, including through the Partnership Knowledge Hub involving Member States representatives, will start rolling out its activities, with the publication of the first horizontal Biennial Monitoring Report on European Partnerships. The CPC will continue to undertake activities to provide **horizontal support to the implementation of European partnerships**, including practical guidance on how to operationalise synergies between partnerships and support to implement the necessary monitoring and evaluation activities.

The EU Missions and Partnerships will serve as the carriers of **reinforced coherence and synergies** at EU, national and/or regional level. As regards the development of synergies and complementarities between partnerships, the Joint Undertakings will have 12 months to establish back office arrangements providing horizontal support. DG R&I, and the CIC in particular, will drive the implementation of these arrangements.

The **monitoring framework for Horizon Europe** - being gradually put in place over 2022 - will enable an annual reporting on the impact of Horizon Europe, including through the publication of the Annual Report on Research and Technological Development Activities of the European Union and Monitoring of Horizon Europe, and also be the basis for the budget performance reporting. In the context of the **R&I Data strategy of Horizon Europe**, the focus will be on the operationalisation of the new monitoring framework (Key Impact Pathways) and the monitoring of the EU Missions (**classification of projects contributing to Missions**), as well as on supporting **knowledge management** within the Commission's services.



We will explore the opportunities to use Artificial Intelligence and data analytics for decreasing error rate in Horizon Europe.

**Commissioner Mariya Gabriel  
hearing on 2020 discharge  
November 2021**

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In 2022, we will expand the public and internal use of **Horizon Dashboard** and the European data for policy initiative (national and regional R&I micro-data). Data work will underpin several actions under the **Dissemination & Exploitation Strategy**.

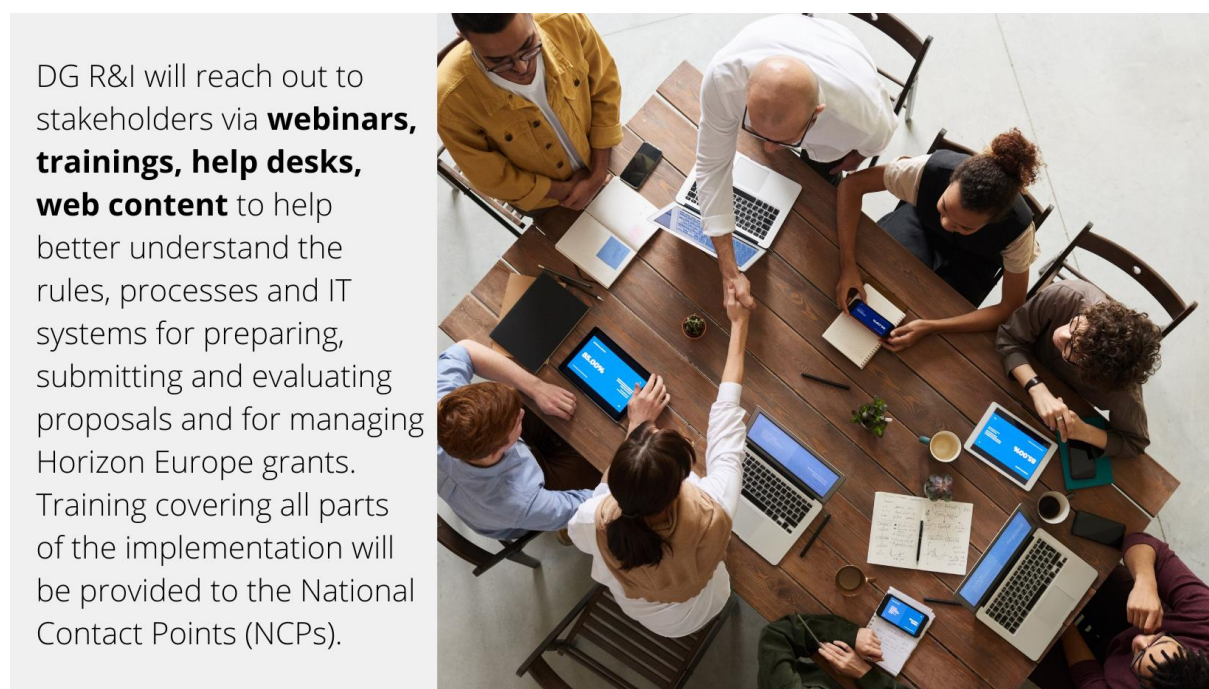
The CIC will enable Horizon Europe to run safely and in a simplified way with the definition of the **Horizon Europe Control Strategy**, building on risk-based reinforced ex-ante control, ex-post financial audits, anti-fraud activities, legislative simplification and on the learnings from the Horizon 2020 control strategy (for more details, see section B. Sound financial management).

The extended use of **simplified cost forms in Horizon Europe grants**, in particular **lump sum project funding** and new unit cost options for personnel cost, will further simplify participation, in particular for newcomers and smaller actors. It will also contribute to the reduction of the financial error rate and aim at a high level of uptake of lump sum project funding in the Horizon Europe work programme topics 2023/24. In order to facilitate this transition, the CIC will provide **guidance, training and dedicated support** on lump sum funding to project officers and participants.

By the end of 2022, the robust Horizon 2020 ex-post audit strategy will be complemented by the **Horizon Europe Common Audit Strategy**. The two strategies will be implemented in parallel as of 2023/24 (see more under section B. *Sound financial management*).

The Fraud and Irregularities in Research (FAIR) Committee will prepare the necessary **risk assessment** in view of the later adoption of a **new Horizon Europe Common Anti-Fraud Strategy for the R&I family** (for more details, see section B. *Sound financial management*).

The triennial **evaluation of the Executive Agencies** will be carried out in 2022.



DG R&I will reach out to stakeholders via **webinars, trainings, help desks, web content** to help better understand the rules, processes and IT systems for preparing, submitting and evaluating proposals and for managing Horizon Europe grants. Training covering all parts of the implementation will be provided to the National Contact Points (NCPs).

The CIC will set up a '**stakeholder' satisfaction monitoring system** to improve its services.

The CPC will support an **impact and policy driven budget management**, by providing a co-created R&I budget at the level of ambition set by the legal acts, the Strategic Plans and the Work Programmes. It will also monitor the budget implementation of the R&I framework programmes and take the measures to reach an optimal budget implementation, including for the Next Generation EU (NGEU) funds.

The **Horizon 2020 ex-post evaluation** due in 2023 will provide evidence on the long-term impact and contribution of past research and innovation actions to the digital, industrial and green transitions and for a resilient society. This large-scale exercise co-led between research and innovation Directorates-General, Executive Agencies and the Common Policy Centre, started in 2021 and will run over 2022 with first evidence from the underlying external studies becoming available. This will directly feed into the interim evaluation of Horizon Europe.

DG R&I will **continue promoting Horizon Europe through communication and outreach initiatives** targeting different audiences throughout 2022. External communication will also support the DG's activities contributing to Foresight in support of the Strategic Plan 2025-2027, such as the report's publication in the second half of next year.

The DG's contribution to the Commission's general objective 'A modern, high performing and sustainable European Commission' is reflected by the R&I actions under the following specific objective:

- Specific objective 7.1: The Common Implementation Centre and Common 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.

## PART 2. Modernising the administration: main outputs for 2022

The internal control framework <sup>(3)</sup> supports sound management and decision-making. It notably ensures that risks to the achievement of objectives are taken into account and reduced to acceptable levels through cost-effective controls.

DG R&I has established an internal control system tailored to its particular characteristics and circumstances. The effective functioning of the service's internal control system will be assessed on an ongoing basis throughout the year and be subject to a specific annual assessment covering all internal control principles.

### A. Human resource management

Following the delegation of programme implementation and the related transfer of staff to Executive Agencies, a continuous review of human resources matters - such as resources allocation to policy priorities, organisational development, working modalities, needs in terms of competences and skills, learning and development - will be pursued to ensure that the organisation continues to meet its objectives while adapting to challenges.



#### STAFF MATTERS

A new HR Strategy of the DG - in line with the corporate one - aims to meet the needs and expectations of the staff. The focus will be put on smooth organisation of the hybrid work.

The analysis and follow up of the 2021 Staff Survey will result in complementary actions supporting the evolution of the Directorate-General.

An important topic will be the implementation of hybrid working, adapted to the work requirements in the Directorate-General and at the same time set within the framework and the flexibility margin to be decided by the Commission. This would have an important impact in the working environment and staff management.

In parallel, the Directorate-General will continue its efforts to increase staff commitment and wellbeing. Staff engagement is a matter of

<sup>(3)</sup> [Communication C\(2017\)2373 - Revision of the Internal Control Framework](#)

high interest and will be followed via actions at Directorate-General level and at individual level, as the case may be, considering the major developments experienced in 2021, mainly driven by the delegation of programme implementation.

The Directorate-General will also continue to support female talent development in line with the Gender Equality Strategy, and has nominated in advance more female colleagues on middle management positions compared with the target established by Commission (8 female appointments instead of 6 requested by the end of 2022).

The Directorate-General will communicate to staff the results and the follow up of Staff Survey 2021. All relevant HR matters will be communicated via posting on DG RTD intranet, newsletters, lunch conferences, as the case may be. A good communication supports an open and constructive working environment, building trust in addition to knowledge and information sharing as well as staff engagement.

## **B. Sound financial management**

This section describes the measures put in place to provide to the Authorising Officer by Delegation with reasonable assurance that **resources have been used in accordance with the principles of sound financial management and that cost-effective controls**, which give the necessary guarantees for legality and regularity of underlying transactions **are in place**.

Year 2022 will be a year of transition for DG Research and Innovation with the further take-off of the new programme Horizon Europe, while activities of Horizon 2020 will still be on-going. In 2022, a large part of the payment expenditure will be for payments to other implementing bodies such as the Executive Agencies, Joint Undertakings, Public-Public-Partnerships and European Investment Bank / European Investment Fund (only for H2020 legacy financial instruments), as well as payments for the Euratom Research programme grants and contracts.

**Ex-ante controls** are rigorously implemented for each transaction (commitments and payments). Standard ex-ante control measures are in place for Horizon 2020 and Horizon Europe. They are tailored to the different forms of costs and combine trust-based baseline checks and risk-based targeted controls. The Common Implementation Center (CIC) will work with all Research and Innovation family services and the European Court of Auditors to further strengthen the common ex-ante control approach in light of further error reduction.

**The ex-post control for grant management**, part of the common audit strategy adopted in 2016, is largely centralised in the Common Audit Service (CAS) for the whole Research and Innovation family. The CAS undertakes all ex-post audits (representative and risk-based), including those concerning beneficiaries of the Executive Agencies and the Joint Undertakings, and ensures a harmonised approach, minimising the audit burden on

beneficiaries and maintaining and contributing to sound financial management. The robust Horizon 2020 ex-post audit strategy contributes to the assessment of the legality and regularity of Horizon 2020 grants' payments by means of ex-post financial controls.

Together, ex-ante and ex-post controls provide the Authorising Officers by Delegation (AODs) with the necessary elements of assurance on the research and innovation budget under their responsibility. The **Common Implementation Center (CIC)** will work with all Research and Innovation family services and the European Court of Auditors to **design a consolidated control strategy for Horizon Europe** (incl. ex-ante and ex-post controls and anti-fraud).

**The internal control system** of DG Research and Innovation is designed to maintain error rates within an acceptable range. For **Horizon 2020**, DG Research and Innovation remains firmly committed to its objective in reducing the cumulative residual error rate to a lower percentage as close as possible to 2%. Given the results of the audit campaign up until 2020 and the observations made by the European Court of Auditors in its annual reports in 2018 and in 2019, the CIC, in close cooperation with DG BUDG and the IAS, defined and started implementing **an action plan, which aims to reduce further the multiannual error rate of H2020**, and pave the way for a **simpler** and, to the furthest extent possible, an **error free Horizon Europe**. Actions include further simplification, increased use of simplified forms of funding (including lump sums and unit costs), and focused communication campaigns to more "error-prone" types of beneficiaries with higher than average error rates, such as SMEs and newcomers. In addition, enhanced training is provided to internal project officers and External Audit Firms performing audits on behalf of the Commission. By focusing on the most common errors, these events are short and simple, reaching more participants and achieving higher impact.

In the context of further reducing the error rates, the CIC will examine the **existing tools for ex-ante controls**. The CIC will carry out a consultation with the stakeholders in order to collect their views on what improvements should be developed in the grant management risk module or via additional business activity monitoring reports.

It should be noted that although the implementation of these actions has already started, their positive effect in the form of reduction in the multiannual error rate may take time to materialise. However, for Horizon Europe the objective is to achieve a cumulative residual error rate below 2%<sup>4</sup>.

As concerns the **use of simplified forms of costs**, the **Horizon 2020 lump sum** pilot will be continued in 2022. The interim report on the assessment of this pilot has led to the

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<sup>4</sup> No representative error rate for Horizon Europe will be available in 2022 and 2023 as the ex-post audit campaign for the Programme will start at the earliest end of 2023.



decision to increase the use of lump sum project funding under Horizon Europe, starting with calls from 2022 onwards. In addition, two unit cost options for personnel cost have been elaborated and will be introduced in 2022 once the methodology for implementation is finalised.

The Common Implementation Centre provides **common services** in legal support, ex-post audit, IT systems and operations, business processes, programme information and data and dissemination and exploitation to all Research and Innovation DGs, the Executive Agencies and to the Institutionalised European Partnerships established under Articles 185 and 187 of the TFEU and other funding bodies (such as the EIT) implementing Horizon 2020 and Horizon Europe.

In 2022, it will continue to coordinate and facilitate the Horizon 2020 programme implementation across nine other Commission Directorates-General (DG AGRI, DG CNECT, DG DEFIS, DG EAC, DG GROW, DG HOME, DG MOVE, DG ENER and JRC), five Executive Agencies<sup>5</sup> (REA, ERCEA, EISMEA<sup>6</sup> CINEA<sup>7</sup> and the new HaDEA<sup>8</sup>), and eight Joint Undertakings (Bio-based Industries Joint Undertaking (BBI), Clean Sky 2 Joint Undertaking (CS2), ECSEL Joint Undertaking (ECSEL), European High Performance Computing Joint Undertaking (EuroHPC), Fuel Cells and Hydrogen 2 Joint Undertaking (FCH2), Innovative Medicines Initiative 2 Joint Undertaking (IMI2), SESAR Joint Undertaking (SESAR), and Shift2Rail Joint Undertaking (S2R)).



<sup>5</sup> As set-out in the Communication to the Commission on Delegation of the management of the 2021-2027 EU programmes to executive agencies (C(2020)7876/3 dated 11/11/2020)

<sup>6</sup> EISMEA - The European Innovation Council and SMEs Executive Agency

<sup>7</sup> CINEA – The European Climate, Infrastructure and Environment Executive Agency

<sup>8</sup> HaDEA - The European Health and Digital Executive Agency

Since the start of Horizon Europe, the CIC extended its support in the areas mentioned above to all Directorates-General involved in the implementation of Horizon Europe and to the new and successor Funding Bodies implementing the Horizon Europe Framework Programme established under Article 185 TFEU (European Partnership on Metrology) and Article 187 TFEU.<sup>9</sup>

**Acting as a hub** for the above activities, the CIC helps **reduce costs** based on **economies of scale**, envisaging **simplification, synergies and harmonisation**.

Indicators<sup>10</sup> based on the 17 principles of the Internal Control framework were updated at the beginning of 2021. They will be reviewed at the end of 2021 and will be used for the assessment of the internal control system in the Annual Activity Report 2022.

The costs of supervision of grant management, and delegated/externalised bodies (Executive Agencies, Joint Undertakings, Public-Public Partnerships, and EIB/EIF) will be kept to the minimum that is appropriate for a satisfactory balance with the risks to sound financial management.

DG Research and Innovation will keep on working on improving the quality of the accounting and of the financial information. For the closure of the financial year 2021, DG Research and innovation aligned its cut-off methodology with the standard methodology of DG BUDG. With regards to the (significant) part of its budget implemented through indirect management, DG Research and Innovation relies on the reports and accounts provided by the relevant implementing bodies. This information is considered reliably sufficient and, therefore, supervision does not affect 2022 activities.

### **C. Fraud risk management**

The **Common Anti-Fraud Strategy in the Research and Innovation family** (RAFS 2019) and its corresponding Action Plan deal with the fraud risks related to the implementation of the Research and Innovation programmes concerning Grant Management. The Common Audit Service (Unit RTD.H2-CAS) coordinates this strategy, suggests actions, and chairs the Fraud and Irregularities in Research (FAIR) Committee. This unit is also the OLAF and the European Public Prosecutors Office (EPPO) correspondent for the Directorate General Research and Innovation (DG R&I). In addition, the Common Audit Service plays a prominent role in facilitating coordination within the R&I family in relation to OLAF cases involving more than one grant authority.

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<sup>9</sup> Innovative Health Initiative Joint Undertaking (IHI), Global Health EDCTP3 Joint Undertaking (GH EDCTP3), Clean Hydrogen Joint Undertaking (CH), Clean Aviation Joint Undertaking (CA), Circular Bio-based Europe Joint Undertaking (CBE), Key Digital Technologies Joint Undertaking (KDT), Europe's Rail Joint Undertaking (ER), Single European Sky ATM Research 3 Joint Undertaking (SESAR3), Smart Networks and Services Joint Undertaking (SNS), European High Performance Computing Joint Undertaking (Euro HPC)

<sup>10</sup> Internal Control Monitoring Criteria

For the year 2022, the R&I family fraud risk assessment for grants under Horizon Europe will be updated within the FAIR Committee and will be the basis for an update of the Common Anti-Fraud Strategy. Raising anti-fraud awareness among staff and grant beneficiaries will continue to be crucial. Similarly, fraud detection by enhanced data analysis to identify beneficiaries presenting specific risks will remain a priority for the Common Audit Service, in order to better inform the selection of risk audits. The Unit will continue to closely collaborate with OLAF on case selections, investigations and its yearly financial monitoring exercises, and will continue to actively participate in the OLAF-chaired Fraud-Prevention and Detection Network (FPDnet) meetings (both in plenary sessions and in subgroups). In addition, the Unit will cooperate with the EPPO when necessary.

DG Research and Innovation has a separate Anti-Fraud Strategy, which was updated in 2019 and covers areas that are not related to Grant Management, i.e. fraud risks related to financial instruments, procurement, expert management, internal fraud etc. Its Action Plan includes one action aiming to raise awareness among DG Research and Innovation staff about the ethics rules of the Commission, with a particular emphasis on possible conflicts of interests in DG R&I. DG Research and Innovation Anti-Fraud Strategy, will be updated in 2022.

## **D. Digital transformation and information management**

The Commission's Digital Workplace Strategy, placed in the context of the Synergies & Efficiencies Review in the ICT Domain, implements the vision to provide staff with the right IT tools, platforms and services, enable users to work and collaborate anywhere, anytime with fit-for purpose security and the ability to optimise their work experience and productivity. It will be adaptive and flexible in order to incorporate different types of users, new behaviours and new technologies.

The DG will pursue the uptake of the Microsoft 365 environment, and will pay particular attention to the way in which this is merged with the existing Intranet and collaboration environments.

### **Digital solutions**

In 2022, the CIC will continue to on-board entities and programmes under the 2021-2027 MFF to the eGrants suite which became the corporate solution for a fully electronic management of all centrally managed EU funding programmes.

As such, eGrants is contributing to the Digital Transformation of the Commission, with a high visibility to the external stakeholders.

In 2022, CIC will explore the feasibility of a mobile "My EU Project App", aiming at facilitating and simplifying the life of applicants, beneficiaries and experts while managing their EU grants and related tasks. The App would also serve over time as a mobile knowledge and matchmaking tool for different stakeholders. The idea would be to evolve

towards a “corporate” App for all EU grant programmes in line with the philosophy of the eGrants suite, but to develop first a concept of the App within the Horizon Europe environment.

### **Data Assets**

The CIC will intensify their efforts to build the key data assets map for DG R&I (integrated in the R&I Knowledge Base), and will move forward with the deployment of data governance, in particular in collaboration with the key horizontal services (SG, DIGIT, JRC, OP) in the Grant and Procurement Steering Board context.

### **Document Management**

DG R&I will implement proactively, in close cooperation with the Secretariat-General, the application of the eDomec policy on records management and archiving: firstly by stepping-up efficient closure and archival processing of electronic files, and secondly on the identification of files for transfer to the Historical Archives Service for long term preservation based on the Common Retention List of the Commission.

Further, the DG will provide regular training for newcomers on document management (1,5 hours, monthly) as well as individual coaching sessions, and will widely promote the use of the sensitive personal data flag in Ares in order to strengthen the organisation’s output in the domain.

### **Data protection**

DG RTD will follow-up with the implementation of the Commission's Data Protection Action Plan (C(2018) 7432, as reviewed C(2020) 7625).

In particular, it will continue to:

- Organise data protection awareness raising activities (e.g. general and specific trainings);
- Keep the DG’s records up-to-date;
- Monitor the DG’s processing agreements and joint-controllership arrangements;
- Ensure the lawful implementation of data subjects’ rights, in particular by
  - timely answering to the requests or complaints of the data subjects;
  - and ensuring the proper resources for compliance by formally appointing an assistant Data Protection Coordinator as of 1 January.

## **E. Sound environmental management**

The increased global attention to Climate Change and the adoption of the European Green Deal have boosted the necessity to act immediately for decreasing the environmental footprint of institutions, enterprises, and individuals.

DG R&I contributes with the implementation in 2022 of its updated “10-point” action plan for 2022 keeping the profile high for a sustained reduction of travel in general (missions, experts and physical attendance to conferences), whilst at the same time safeguarding the social value that are inherent in physical meetings with stakeholders and citizens. To this end, the DG will promote the extensive use of the new audio-visual equipment installed in all management offices and all meeting rooms, and the use of the brand new TV studio for events and conferences.

Particular consideration will also be given to the space occupancy by selecting where possible sustainable materials for furniture.

As an active participant in the EMAS (EU Eco-management and audit) scheme of the EC, DG R&I will implement the corporate and local actions on waste reduction and sorting, reduction of paper use, water and electricity consumption, and actions aiming at lowering commuting to the office. DG R&I will also implement specific initiatives raising awareness on the emissions produced by digital work and encouraging a more efficient use of IT resources. DG R&I will also promote actions aiming at preserving and increasing biodiversity in the working environment.

## **F. Initiatives to improve economy and efficiency of financial and non-financial activities**

### **Simplification efforts – lump sum funding:**

The extended use of simplified cost forms in Horizon Europe grants, **in particular lump sum project funding** and new unit cost options for personnel cost, will further simplify participation, in particular for newcomers and smaller actors. It will also contribute to the reduction of the financial error. DG R&I aim at a high level of uptake of lump sum project funding in the Horizon Europe work programme topics 2023-24 and to that end, the DG will provide guidance and dedicated support on lump sum funding for project officers and participants.

### **The CIC and CPC services:**

Since the start of Horizon Europe, the Common Implementation Center (CIC) and the Common Programming Center (CPC) have extended their support in many areas in the implementation of Horizon Europe, for instance at the level of IT applications, legal services and assessment of the programmes. All these actions help to reduce costs based on economies of scale, envisaging simplification, synergies and harmonisation.

**ANNEX: Performance tables**

## Part 1. Delivering on the Commission's priorities: main output for the year

### General objective 1: A EUROPEAN GREEN DEAL

General objective 1: A EUROPEAN GREEN DEAL		
<b>Specific objective 1.1: High-quality science, knowledge and innovative solutions support climate policies and help to preserve biodiversity, ecosystem and natural resources</b>		Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM
<b>Main output in 2022:</b>		
New policy initiatives		
Output	Indicator	Target
Hydrogen Strategy: SET-Plan Communication	Adoption of the Communication	Q4
R&I chapter in the Communication on solar energy (DG ENER is in the lead)	Inclusion of the chapter in the Communication	Q1
	Publication of the R&I factsheet	Q1
Bioeconomy Progress Report	Adoption of the report, tracking the successful adoption of the Bioeconomy Progress Report	MARCH 2022
Plastic Pirates Go Europe !	Student and citizen plastic sampling campaign in rivers and seas launched in at least 10 Member States in 2022	Q4
External communication actions		
Output	Indicator	Target
New European Bauhaus Festival	Nr of participants (physical/digital)	50.000
Bioeconomy Conference	Number of participants	500
	Social media impressions	1000
Strategic Research and Innovation Plan for Chemicals and Materials (SRIP) SWD	Brochure number of page views	200
	Website total number of views	1000
Other important outputs		
Output	Indicator	Target
Safe-and-Sustainable-by-design (SSbD) criteria	SWD on SSbD criteria	Q4
Strategic Research and Innovation Plan (SRIP) for Chemicals in the Green Deal Era	SWD on SRIP	Q4

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Hydrogen strategy: Implementation of the ERA Pilot on Hydrogen: Hydrogen Observatory through Clean Hydrogen JU	Hydrogen Observatory set-up and running	Q4
Hydrogen Strategy: CSA on renewable hydrogen in Africa to reinforce the long term AU-EU HLPD CCSE Partnership (through Clean Hydrogen JU)	Selected and awarded CSA projects	Q4
Mission Innovation: Mission on Clean Hydrogen	Publication of the detailed implementation plan	Q1
Mission Innovation: four 'second-wave' Missions (Biorefineries, Carbon Dioxide Removal, Cities, and Industrial Decarbonization) (Mission Innovation)	Commission input in the 'second-wave' Missions	Q1
Ocean and Water Mission contributing to the implementation of EU Biodiversity strategy and EU Zero Pollution Plan	Launch of the amendment to the 2022 HE Work programme	Q2
Mission on Adaptation to Climate Change: establishment of key structures, including setting-up of the Mission Implementation Platform	The Implementation Platform is operational	Q4
'Soil' Mission: Engagement sessions at regional level on soil health living labs	Launch of support activities via Soil Mission Work Programme 2022	Q4
Development of a Nature-based solutions map for Europe	Follow up of feasibility study for developing a Nature-based solutions map for European Commission	Q4
Chemicals Strategy for Sustainability: launch of the European partnership on chemical risk assessment with Member States	The PARC partnership grant agreement is signed and the partnership launched.	Q2



<i>Specific objective 1.2: Mainstreaming of the public and private research and innovation investments for climate actions strengthens the European Green Deal's impact</i>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Staff Working Document Common Industrial Technologies Roadmaps	Delivery of two Roadmaps (one on low-carbon, one on circular)	Q2 - Q4
Manifesto on Advanced Materials	Workshop with representative materials' community to promote implementation of the manifesto,	Q1

<i>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</i>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
<b>New policy initiatives</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Climate-Neutral and Smart Cities Mission: Selection of cities to participate in the Mission	High quality applications from cities eligible to participate in the Mission	100 by Q4
Institutionalised partnerships (Clean Aviation, Clean Hydrogen, Europe's Rail, Circular Bio-Based Europe)	Publication of Annual Work Programme 2022	Q1
Co-programmed and co-funded partnerships	High quality proposals selected as a response to the relevant calls published in the WP 2021-2022	Q4
European Euratom Partnership PIANOFORTE	Launch of the partnership	Q3
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Communication campaign on the EU Missions	Target audience reached	500.000
Communication campaign on the EU Partnerships	Target audience reached	250.000
Promotional video of Euratom Programme	Nr of views	5000

Output	Indicator	Target
Low Carbon & Industrial strategy: two ERA Common Industrial Technology roadmaps in the areas of low carbon technologies for energy-intensive industries and circular industrial technologies	Number of online views	1000
<b>Other important outputs</b>		
Output	Indicator	Target
Partnership Work Programme	Increase of external participation	from 30 to 40% in calls;
Setting up of a steering group to provide advice and input to the Euramet	15 independent experts, including Chairs appointed	Q3 - Launch of Steering group

## **General objective 2: A EUROPE FIT FOR THE DIGITAL AGE**

<b>General objective 2: A EUROPE FIT FOR THE DIGITAL AGE</b>		
<b>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</b>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
<b>New policy initiatives</b>		
Output	Indicator	Target
Administrative Agreement with JRC on GEOSS	Launch of Activities under new administrative Agreement with JRC on “Leveraging European data-sharing and exploitation practices within GEOSS (Global Earth Observation System of Systems)”	2022
<b>External communication actions</b>		
Output	Indicator	Target
EURAXESS biennial conference + side event (March 2022)	Participants	300
Infographic on ERA Hubs for Circularity	Target audiences reached	2,000
The second Transition Performance Index	Nr of website page views Social media (paid) impressions	2,000 10,000

Other important outputs		
Output	Indicator	Target
Increased outreach of EURAXESS	<ul style="list-style-type: none"> <li>- average number of monthly page views</li> <li>- number of registered research institutions, universities and funding organisations</li> </ul>	<ul style="list-style-type: none"> <li>- 2.5 million in average</li> <li>- 20.000 research institutions, universities and funding organisations</li> </ul>
Expansion of EURAXESS network	<ul style="list-style-type: none"> <li>- number of registered users</li> <li>- number of job offers</li> <li>- number of countries in the network</li> </ul>	<ul style="list-style-type: none"> <li>- 165.000 users</li> <li>- 41.000 job offers</li> <li>- 43 countries</li> </ul>
Characterisation of research data practices across the ERA	Results of study to characterise the European research data landscape in Europe	Q3
Launch of the procurement of a trusted data repository for Horizon Europe beneficiaries	Procurement of a trusted data repository for Horizon Europe beneficiaries launched	Q2
Open science policy framework and monitor	Testing of Open Science policy framework and monitoring platform	Q4
Support the establishment of a European cultural heritage collaborative space	A cluster of R&I actions comprising at least 6 topics with a budget of at least 90 million € for R&I actions that will support the establishment of innovative services, algorithms and applications for the cultural heritage collaborative cloud platform.	Published in Horizon Europe work programme 2023-2024 – Q4
Missions taking into account opportunities for the use of Artificial Intelligence (AI)	<p>Appropriate take-up of AI in the 2021-2 Work Programmes of the Missions</p> <p>Appropriate contribution to the revision of the Work Programme 2021-2 with regard to AI</p> <p>Contribution to the R&amp;I Investment Agenda for AI for the Work Programme 2023-24</p>	<p>Q1</p> <p>Q2</p> <p>Q4</p>

*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*

*Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM*

**Main output in 2022:**

**New policy initiatives**

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Operational governance structure for technology infrastructures	1st meeting of the governance group	Q4
	Political endorsement of the governance structure during CZ presidency	Q4
Set-up the permanent ERA Forum, as well as its eventual sub-groups, through a Commission decision, based on the elements provided in the Conclusions on the new ERA Governance, adopted by the Council on 26 November 2021, such as the co-chair between Commission and Member States, the systematic involvement of stakeholders and the Forum's role as the main implementation body for actions in the ERA policy agenda.	Creation of the ERA Forum	Q1
Put in place the monitoring and reporting mechanism for the new European Research Area, based on the Council Recommendation on a Pact for R&I, as well as the Council conclusions on the new ERA Governance. This will include three main elements: the online ERA policy platform; the Scoreboard and Dashboard; and producing reports on the performance of Member States.	Creation of the ERA policy platform and the Scoreboard/Dashboard	Q2
Co-creation of the WIDERA and Research Infrastructures parts of the Horizon Europe work programme 2023-24	Adoption of the related part of the Horizon Europe Work Programme	Q3

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Legislative initiative for “A European framework to attract and retain R&I talents in Europe”	Proposal for a legislative initiative	Q4
ERA4You policy initiative available, following Knowledge Ecosystems study, and related measures introduced in WIDERA 2022 and 2023-2024	ERA4You initiative proposed	Q1
	ERA4You actions introduced in WIDERA	Q3
<b>Initiatives linked to regulatory simplification and burden reduction</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Baseline for ensuring an EU copyright and data legislative and regulatory framework fit for research	Studies commissioned for identifying barriers to access and reuse of publicly funded scientific outputs and including recommendations on possible legislative and non-legislative measures	Q1
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Promotion of the launch of ERA4you policy initiative	Target audience reached	300.000
European Union Contest for Young Scientist (EUCYS) event	Video (target audience reached)	10.000
	Press outreach – number of articles	25
EuroScience Open Forum (ESOF) 2022 - Leiden	Nr of participants	4.500
Promotion of ERA related actions under the PACT and ERA policy agenda	Target audience reached	500.000
French presidency ‘European Strategy Forum on Research Infrastructures (ESFRI) Conference’ (March, Paris)	Number of participants	350
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Action plan for raising awareness on the European Competence Framework for Researchers and for the development of skilling actions for researchers	Proposal for an action plan	Q3
Design and technical specifications of ERA Hub concept by launching a pilot	Co-design of the details of the initiative and definition of technical specifications of the ERA Hubs	Q4

Output	Indicator	Target
Coordination structure supporting the European Open Science Cloud (EOSC) Steering Board	Renewal of the EOSC Steering Board as an independent Commission Expert Group	Q1
Agreement between leading European research funders and performs willing to reform research assessment developed and signed	Setup of agreement between leading European research funding and research performing organisations willing to reform research assessment facilitated	Q4

<i>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.</i>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
<b>External communication actions</b>		
Output	Indicator	Target
Appointment of the first EIC Board President	News alert page views Engagement rate	1.000 1%
<b>Other important outputs</b>		
Output	Indicator	Target
The European Innovation Council (EIC) WP for 2022 will be implemented and third annual work programme for the EIC for 2023 will be prepared following the advice of the EIC Advisory Board and adopted by the European Commission at the end of 2022.	Implementation of EIC WP 2022	Q4
	Adoption of EIC WP 2023	Q4

## General objective 3: AN ECONOMY THAT WORKS FOR PEOPLE


General objective 3: AN ECONOMY THAT WORKS FOR THE PEOPLE		
<b>Specific objective 3.1: Research and innovation actions, increased R&amp;I investments and the R&amp;I component of the European Semester boost economic growth and jobs creation</b>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
Evaluations and fitness checks		
Output	Indicator	Target
Assessment of the implementation of the R&I related investments and reforms RRP	Timely assessment of R&I milestones and overall implementation	Bi-annual assessment in accordance with the reporting to the European Parliament and ad-hoc assessment of the adoption of the specified milestones and targets for the disbursement of the different payments
External communication actions		
Output	Indicator	Target
Horizon Impact Award 2022	Web promotion	10,000
Industry 5.0 award	Target audiences reached	2500
Other important outputs		
Output	Indicator	Target
Science, Research and Innovation Performance of the EU 2022 Report	Publication of the Science, Research and Innovation Performance of the EU 2022 Report	Q2-Q3
2022 edition of the European Innovation Scoreboard	Publication of the 2022 edition of the European Innovation Scoreboard	Q2-Q3
2022 edition of the Industrial R&D Investment Scoreboard	Publication of the 2022 edition of the Industrial R&D Investment Scoreboard	Q4
Missions portfolios of Horizon-funded results	First version of portfolios delivered and displayed in the Horizon Results Platform	Q2-Q3
Horizon Policy Support Facility 2.0	Delivery of the first set of projects	Delivery of "PSF Country" exercises for 4 countries and delivery of new "PSF Challenge" exercises by the end of 2022
Enhanced dialogue with Member States supporting the implementation of R&I related investments and reforms	Reinforced dialogue with Member States in the implementation of the actions related to investments and reforms	Done by the end of 2022

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Strong R&I dimension in the new cycle of Cohesion Programming, including strengthened synergies between Horizon Europe and Cohesion Programming	R&I investment under the new Cohesion programmes with the explicit use of the synergies provisions	Included by the end of 2022
Knowledge Exchange Platform & Joint Action Plan with the Committee of the Regions	Enhanced dialogue with regions and Committee of Regions (CoR) on R&I investments and reforms	2 joint thematic seminars with the CoR.: Q2 and Q4  Annual reporting on Q4 on the Joint Action Plan
A collaborative platform for innovation, that will harness Europe's cultural heritage and cultural and creative industries as an engine of sustainable and green innovation, economic growth and employment	At least one specific R&I action introduced in Horizon Europe's WP2022 under Cluster 2 to set the foundation for the collaborative platform  A cluster of R&I actions comprising at least 6 topics with a budget of at least 90 million €. These actions will support Europe's cultural and creative industries to become an engine of sustainable and green innovation, economic growth and employment	Q2  Q4
Communication on revised State-aid rules, including participation as speaker in conferences/workshops/other events	Number of workshops/conferences/other events	5-10 events, depending on request throughout 2022
Embed knowledge Valorisation in the Missions	Missions work programme parts clearly integrating knowledge valorisation requirements  Use of knowledge valorisation concepts, methods and tools to promote the objectives of the Missions	Q3, Q4  Q4
First-ever Industry 5.0 Award	Presentation of first Industry 5.0 Award	Q2



<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Guiding Principles for knowledge valorisation	<p>Commission proposal for a Council recommendation</p> <p>Number of Member States(MSs) that take policy initiatives based on the guiding principles by end of 2022</p> <p>Outreach to stakeholders in EU Knowledge Valorisation Week 2022</p> <p>Enhanced coverage of EU Knowledge Valorisation Platform</p>	<p>Q2</p> <p>5 MSs</p> <p>Q1</p> <p>Q3-Q4</p>
Code of practice for the smart use of IP	<p>Delivery of the code</p> <p>Number of key stakeholders (i.e TTOs/KTOs in RTOs) using the code by end of 2022</p> <p>Awareness raising campaign (with EPO/EUIPO/EISMEA)</p>	<p>Q2</p> <p>10</p> <p>Q2 – Q4</p>
Code of practice for standardisation	<p>Delivery of the code</p> <p>Number of H2020 and Horizon Europe projects using the code</p> <p>Awareness raising campaign on standardisation</p>	<p>Q2</p> <p>10 R&amp;I projects by end 2022</p> <p>Q2 – Q4</p>
Mapping knowledge valorisation in EU Member States and Associated Countries, with focus on societal engagement and industry academia relations	<p>Deliver policy insights for developing a code of practice for citizens, industry, academia engagement</p>	<p>Q3</p>
Knowledge valorisation skills, gaps and future needs	<p>Deliver a gap analysis on the required skills – promote the professionalization of TTO/KTOs</p> <p>Deliver a list of skills as base for a toolkit for knowledge valorisation experts</p>	<p>Q3</p> <p>Q4</p>

## General objective 4: A STRONGER EUROPE IN THE WORLD

General objective 4: A STRONGER EUROPE IN THE WORLD		
<b>Specific objective 4.1: Regional research and innovation strategies and broader association policy contribute to promoting common European R&amp;I values and creating a global Research and Innovation Space</b>		<i>Related to spending programme(s): Horizon 2020, Horizon Europe, EURATOM</i>
<b>Main output in 2022:</b>		
New policy initiatives		
Output	Indicator	Target
Preparing and implementing Horizon Europe Association Agreements	<ul style="list-style-type: none"> <li>• Association agreements negotiated in 2021 start producing legal effects</li> <li>• Issuing the call for funds and ensuring an appropriate distribution of the contributions to each programme part of the Horizon Europe Programme according to the agreed priorities and performance of entities from these countries</li> <li>• Informal discussions on possible association to Horizon Europe completed with highly industrialised third countries (Japan, Korea, Singapore, Australia, New Zealand)</li> <li>• Negotiating mandates for agreements with highly industrialised third countries requested (likely with Canada)</li> </ul>	<p>First half of 2022</p> <p>End of 2022</p> <p>End of 2022</p> <p>Second half of 2022</p>
Organisation and follow-up to different Policy Dialogues under Agreements	<ul style="list-style-type: none"> <li>• A meeting of Joint Committee under Association Agreement took place</li> <li>• Rules of Procedure adopted by the Joint Committee</li> <li>• Common priorities discussed and where possible identified</li> </ul>	<p>End of 2022</p>
 Launch of the EU-Africa Global Health EDCTP3 Joint Undertaking (follow-up to EDCTP2) as a major implementation step of the Africa Strategy	Launch the first calls for proposals under Global Health EDCTP3 Joint Undertaking	Q2


<b>Evaluations and fitness checks</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Further integration of the Western Balkans into the new European Research Area	14 ERA actions	Progress on the individual 14 ERA actions
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Celebrating 10 years of global collaboration on rare diseases research	Video production showcasing the 10 years achievements of IRDiRC + launch of media campaign	To be done Q1-Q2
Factsheet EU-China Joint Roadmap for Future Science, Technology and Innovation Cooperation (launch of the EU-China Flagship on Climate Change and Biodiversity)	Page views	1000
News Alert on the signature of an Administrative Arrangement for co-funding of Chinese participants in Horizon Europe.	Online views Number of page views	400 200
Video on Implementing the global approach to R&I at the French Presidency Conference in March 2022	Nr of online views	2000
Video on Joint EU-Africa Innovation Agenda	Nr of online views	2000
Union for the Mediterranean R&I Ministerial June 2022: three factsheets on R&I Roadmaps Climate Change, Renewable Energy and Health.	Number of online views	1000
Western Balkans Campaign	Podcasts number of total listens Factsheets number of downloads	500 200
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Launch of multilateral dialogue and agreement on values and principles as basis for international engagement on R&I	Agreement by Member States on the values and principles to be endorsed at the French Presidency Conference.	March (follow up will be done on a longer-term basis)
Reinvigorate R&I cooperation with the US	Development of new actions within the Trade and Technology Council Working Group 2	By Q2
	Reinvigorate the Energy Council Technology Working Group	By Q2

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
	Revamp the dialogue with the State Department and other research and innovation interlocutors to identify areas of future collaboration	By Q4
Deliver the EU-China Joint Roadmap for Future Science, Technology and Innovation Cooperation	Signature of administrative Arrangement on co-funding by China (Commission Decision)	Q1 <i>*depends on negotiations with third countries</i>
	Dialogue with China on all points of the roadmap with organisation of Joint S&T Cooperation Committee (JCM)	Q2 (JCM) and continued dialogue by Q4
	Launch of the R&I Flagship on Climate Change and Biodiversity	Q4
Joint European Union-African Union Innovation Agenda	Acknowledgement at the European Union-African Union Summit 2022 of technical arrangements agreed by the senior officials of the High Level Policy Dialogue	Q1 <i>*depends on negotiations with third countries</i>
Endorsement of the new Union for the Mediterranean R&I Agenda	Endorsement of the Agenda (roadmaps and implementation plan) at the Union for the Mediterranean Research & Innovation Ministerial in June 2022. This entails an NBI procedure with Commission Decision and Council endorsement	June 2022 <i>*depends on negotiations with third countries</i>
Implement the EU-CELAC Strategic Roadmap for R&I	Organisation of a EU-CELAC JIRI (Joint Initiative on Research and Innovation) Senior Officials Meeting	By Q4
	Organisation of two meetings of the EU-CELAC working group for research infrastructures	By Q4
Policy Dialogues with partner countries covered by a S&T Agreement	Joint Committees planned for 2022 organised for each country	Q4 (throughout the year)
Deepen cooperation with strategic partners	Establishment of NCP networks in each country.	By Q2
	Co-funding mechanisms or equivalent arrangements established in 80% of the concerned countries	By Q4

Output	Indicator	Target
	Implementation of the strategy to increase international participation in Horizon Europe and integrate partner countries in relevant Partnerships under Horizon Europe	By Q4
Strengthened participation of the Western Balkans in Horizon Europe	Number of proposals	800
	Amount of funding received	250 Million

## **General objective 5: PROMOTING OUR EUROPEAN WAY OF LIFE**

General objective 5: PROMOTING OUR EUROPEAN WAY OF LIFE		
<b>Specific objective 5.1: Research and Innovation develop and deploy solutions, technologies and innovations to tackle emerging threats and improve crisis preparedness</b>		<i>Related to spending programme(s): FP7, Horizon 2020, Horizon Europe</i>
<b>Main output in 2022:</b>		
New policy initiatives		
Output	Indicator	Target
Health preparedness and resilience, referred to by President von der Leyen in her SOTEU 2021: R&I contribution to HERA and its governance: Develop a pandemic preparedness partnership.	The concept and draft strategic R&I agenda for the pandemic preparedness partnership proposal are agreed with the EaC, to form the basis for a partnership topic in the Horizon Europe Work Programme 2023	Q4
Health preparedness and resilience, referred to by President von der Leyen in her State Of the European Union (SOTEU) 2021: Transformation of healthcare systems: Develop a European partnership on transforming health and care systems., including the first Annual Work Plan and the strategic R&I agenda agreed	Selection of the best candidate partnership.	Q3

<i>Specific objective 5.2: Research and innovation support the European health initiatives including the European plan to fight cancer</i>		<i>Related to spending programme(s): FP7, Horizon 2020, Horizon Europe</i>
<b>Main output in 2022:</b>		
<b>New policy initiatives</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
'Cancer' Mission: contributing to the EU beating Cancer Plan, setting-up of a platform for the integrated provision at EU level of research infrastructure services to support research addressing cancer.	Launch of support activities via Cancer Mission Work Programme 2022	Q4
 Contribution to the European Health Data Space (referred to in CWP 2022) on supporting use cases relevant to the EU research community (research, regulatory and public health).	Launching of a pilot for the development and design of EHDS 2 core services to support secondary purposes (i.e. policy making and regulatory activities, research)	Q3
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Hybrid event on the Mission on Cancer (childhood care) Q3	Nr of participants	300
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Providing the R&I pillar of the Social action plan; A strategic research agenda for preparing the future of work	Publication of the report	December 2022
Provision of comprehensive open data on SARS-CoV-2 and other infectious diseases	Additional genomic sequencing data mobilised and other data types integrated	Q4
Extend the duration of the Manifesto for EU COVID 19 Research, review its application so far, explore ways to apply in other public emergencies (i.e. under HERA)	Renewed manifesto, including the review of its implementation and a proposal for extension to other public emergencies (i.e. under Inclusion of the new Manifesto in HERA)	Q4
Future of Work policy report on R&I Investment Strategy	Target audiences reached	1000

Output	Indicator	Target
Contribution to the Pharmaceutical strategy. Launch of the new Innovative Health Initiative (IHI) Joint Undertaking that will bring together the health industries into a novel cross sectorial collaborative program	Launch the first calls for proposals under IHI Joint Undertaking .	Q2
Contribution to the implementation of the Communication on enabling the digital transformation of health and care in the Digital Single Market	Implementation of a proof of concept for the 1+MG federated infrastructure for cross-border sharing/access of genomic and other health data, Delivery of the first use case on the rare diseases field.	Q3-Q4

## **General objective 6: A NEW PUSH FOR EUROPEAN DEMOCRACY**

General objective 6: A NEW PUSH FOR EUROPEAN DEMOCRACY		
<b>Specific objective 6.1: European research and innovation support citizens' involvement, social inclusion and equalities in Europe, including through communication of the European research and innovation added value</b>		Related to spending programme(s): Horizon 2020, Horizon Europe
<b>Main output in 2022:</b>		
New policy initiatives		
Output	Indicator	Target
Contribution to the Conference on the Future of Europe and citizen engagement in R&I policy. Launch dedicated initiatives for citizens' engagement in the Area of the European Green Deal throughout 2022	Provision of 27 citizen engagement events in each Member State debating on citizens' visions for sustainable and smart mobility, sustainable food systems, and efficient buildings  Provision of a high-level event for citizens to deliver their results to the Commission. This citizen input will feed both into the Conference on the Future of Europe, as well as in an expert-drafted roadmap for the climate transition].	Q1  April 2022

<b>Enforcement actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Implementation of the ERA policy agenda on gender equality, including co-design with Member States and R&I stakeholders of inclusive gender equality plans and policies: a study on intersectional aspects in R&I, support R&I organisations to develop gender equality plans (GEPs), internal and external capacity building for the integration of a gender dimension in R&I content	Final study delivered; building on policy workshop on intersectionality with R&I stakeholders and decision makers	April 2022
	Six trainings to R&I organisations in Member States under the Pilot facility for GEPs. Seven mutual learning workshops, including with the European Alliances foreseen under the Pilot facility for GEPs	January – July 2022
	One workshop with research funders on integration of gender dimension and two trainings to EC staff	Q2 – Q4
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
European Research and Innovation Days	Nr of participants	15 000
Promotion of the expert-drafted roadmap for the climate transition, built with the active involvement of citizens.	Social media reach	50.000
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Expert Group on the impact of covid-19 on women researchers	Four experts meeting and one policy workshop	All events having taken place by Q4 2022



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

General objective 7: A modern, high performing and sustainable European Commission		
<i>Specific objective 7.1: The Common Implementation Centre and the Common 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</i>		
<b>Main output in 2022:</b>		
Initiatives linked to regulatory simplification and burden reduction		
Output	Indicator	Target
Increased use of Lump Sums	Increased use of Lump Sum in 2022 calls	Use lump sum funding in selected RIA, IA, and CSA calls, <b>covering 5%</b> of the Pillar 2 budget in 2022.
Simplified cost calculation for personnel costs	Use of unit costs for personnel methodology in 2022 calls	End 2022
Corporate Annotated Model Grant Agreement, including HE specifics	A finalised corporate Annotated Model Grant Agreement, published on the Participant Portal	Q2 2022
Horizon Europe common Audit Strategy.	Finalised and adopted (in HE Steering Board) HE common Audit Strategy	Q4 2022
Experts management	Improved IT solution for the management of Experts evaluators and PMON monitors	2 pilots in the ECS Back Office application : one for PMON monitors (Q3) and one for evaluators (Q4)
Evaluations and fitness checks		
Output	Indicator	Target
The triennial evaluation of the Executive Agencies	Evaluation report of the six Executive Agencies	Q4
“stakeholder” satisfaction monitoring system	CIC satisfaction Survey	Q1-Q2
State of progress of Horizon 2020 ex-post evaluation analytical studies	3 horizontal Horizon 2020 ex-post evaluation studies and 5 impact area evaluation studies finalised	By Q4
Deploying the Horizon Europe key impact pathways and overseeing their operationalisation into the Horizon Dashboard.	First Key Impact Pathways operational in Horizon Dashboard	Q2

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Annual Report on Research and Technological Development Activities of the European Union and Monitoring of Horizon Europe in 2021	Adoption of the Commission Communication on the Annual Report on Research and Technological Development Activities of the European Union and Monitoring of Horizon Europe in 2021	Q2
<b>External communication actions</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Audiovisual guidance material to inform, inspire and guide internal and external stakeholders – e.g. on lump sums, Horizon Dashboard, Horizon Results Booster; interviews with Dissemination & Exploitation ecosystem stakeholders etc.	Video views	400
Increased level of understanding of internal (staff) and external stakeholders of the rules, processes, and IT systems for preparing, submitting and evaluating proposals and for managing the HE grants, including grants based on lump sums	Number of Webinars, Helpdesk services, trainings	12 events by end of 2022
Video on Horizon Europe Strategic Plans and the Work Programmes	Nr of views	1,000
<b>Other important outputs</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Preparatory co-design work for the strategic planning 2025-2027	Co-design session held to provide input for the strategic plan 2025-2027	Q2
Amendment of the 2021-2022 'main' work programme implementing the Specific Programme Implementing Horizon Europe – The Framework Programme for Research and Innovation	Adoption of the Commission Implementing Decision on the amendment of the 2021-2022 'main' work programme implementing the Specific Programme Implementing Horizon Europe including Work Programme on Missions 2022	Q2
The 2023-2024 'main' work programme implementing the Specific Programme Implementing Horizon Europe – The Framework Programme for Research and Innovation	Adoption of the Commission Implementing Decision on the 2023-2024 'main' work programme implementing the Specific Programme Implementing Horizon Europe including Work Programme on Missions	Q4

<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Impact & policy driven budget management	Commission 2023 Draft Budget proposal for Horizon Europe and Euratom  Level of Horizon Europe and Euratom budget implementation of all implementing bodies (including former Framework programmes)	Level of budget in the COM proposal and final voted budget.  100% end of 2022
Performance management framework for EU Missions	Systems and operational guidelines for project evaluation, monitoring and portfolio management in place	Q3
Citizen engagement with EU Missions	Identification of common tools across all missions for engaging citizens with missions as result of joint work with services	Q2
First Biennial Monitoring Report on European Partnerships	Adoption of the First Biennial Partnerships Monitoring Report	Q1
Foresight in support of the Strategic Plan 2025-2027	Set of (horizontal & thematic) foresight reports published	Q3-Q4
Designing the Back Office Arrangements for Joint undertakings	Designed Back Office Arrangements	Q4
Horizon Europe Control Strategy	New Horizon Europe Control Strategy, adopted by HE Steering Board	End 2022

## Part 2. Modernising the administration: main outputs for 2022

The internal control framework <sup>(11)</sup> supports sound management and decision-making. It notably ensures that risks to the achievement of objectives are taken into account and reduced to acceptable levels through cost-effective controls.

DG R&I has established an internal control system tailored to its particular characteristics and circumstances. The effective functioning of the service's internal control system will be assessed on an ongoing basis throughout the year and be subject to a specific annual assessment covering all internal control principles.

### A. Human resource management

**Objective:** DG R&I employs a competent and engaged workforce and contributes to gender equality at all levels of management to effectively deliver on the Commission's priorities and core business.

#### Main outputs in 2022:

Output	Indicator	Target
Implementation of the local HR Strategy, developed to support the evolution of the Directorate-General and improve staff engagement.	Action Plan – local HR Strategy	By end of 2022
Analysis and monitoring 2021 Staff Survey	Action plan, complementing the local HR Strategy	By end 2022

<sup>(11)</sup> [Communication C\(2017\)2373 - Revision of the Internal Control Framework](#)

## B. Sound financial management

**Objective: The authorising officer by delegation has reasonable assurance that resources have been used in accordance with the principles of sound financial management and that cost-effective controls are in place which give the necessary guarantees concerning the legality and regularity of underlying transactions**

### Main output in 2020:

Output	Indicator	Target
Effective controls: Legal and regular transactions	Estimated risk at payment and at closure for Horizon 2020 grants	As close as possible to 2%
	Estimated risk at payment and at closure for Horizon Europe grants	Below 2%. <sup>12</sup>
Effective controls: Safeguarded information	Number of security incidents with significant impact on the confidentiality, integrity or availability of Information Systems, reported during the year	No incident with significant impact
Efficient controls	Time-to-pay	100% of the total amount paid on time
	Operational budget execution	100% of operational commitment and payment appropriations (C1)
Cost of controls, Effectiveness control	Overall estimated cost of controls for DG R&I	Below 3 % of funds managed

<sup>12</sup> No representative error rate for Horizon Europe will be available in 2022 and 2023 as the ex-post audit campaign for the Programme will start at the earliest end of 2023.

## C. Fraud risk management

**Objective:** The risk of fraud is minimised through the application of effective anti-fraud measures and the implementation of the Commission Anti-Fraud Strategy (CAFS) <sup>(13)</sup> aimed at the prevention, detection and correction <sup>(14)</sup> of fraud.

### Main outputs in 2022:

Output	Indicator	Target
Enhanced data analysis	Selection of beneficiaries for risk-based audits Increased number of risk-based audits	Continuous
Fraud Prevention and Irregularities in Research (FAIR) Committee	Number of meetings	2 by 31 December 2022
R&I family's fraud risk assessment (grants), within the FAIR Committee.	Fraud-proof Horizon Europe	31 December 2022
Increased level of staff awareness about the Commission ethics rules and ethical issues, and in particular the risk of conflicts of interests	Newcomers have received relevant information on ethics obligations as part of the welcome package.	YES
Increased level of new staff awareness on anti-fraud	New comers dealing with grants have followed an anti-fraud training	YES
Updated DG R&I Anti-Fraud Strategy (excluding grants)	Publication of the document	31 December 2022

<sup>(13)</sup> Communication from the Commission 'Commission Anti-Fraud Strategy: enhanced action to protect the EU budget', COM(2019) 196 of 29 April 2019 – 'the CAFS Communication' – and the accompanying action plan, SWD(2019) 170 – 'the CAFS Action Plan'.

<sup>(14)</sup> Correction of fraud is an umbrella term, which notably refers to the recovery of amounts unduly spent and to administrative sanctions.

## D. Digital transformation and information management

**Objective: DG Research and Innovation is using innovative, trusted digital solutions for better policy-shaping, information management and administrative processes to forge a truly digitally transformed, user-focused and data-driven Commission**

### Main outputs in 2022:

Output	Indicator	Target
New and current staff is being trained to use Microsoft 365 and Teams	Percentage of staff having benefitted from training or coaching in Microsoft M365 and Teams	100% of newcomers and 50% of statutory and non-statutory staff trained
Proper filing of ARES and ARESlook records (excluding HRS documents)	Percentage of unfiled records	Under 3%
Implementation of Corporate principles for data governance	Agreed approach to data ownership and governance for all Grants and Procurement Management in the corporate context	Q4
Corporate use of eGrants	Increased corporate use of eGrants	Continuous on-boarding activities for different entities (Joint Undertaking's, INTPA, NEAR, DEFIS, ECHO, SANTE, CNECT, GROW, EUROPOL, ...) until end 2022
RTD staff awareness of the data protection implications in their daily work and of their responsibilities towards the data subjects	Additional staff trained on data protection	Additional 20% of staff trained on data protection by end of 2022
Proper resources allocated to ensure the compliance of DG RTD with the Commission's data protection action plan	Increasing number of FTE allocated to the DPC	Formal appointment of an assistant Data Protection Coordinator in January 2022, increasing FTE allocated to DPC from 1.5 to 2

## E. Sound environmental management

**Objective: Service DG R&I takes full account of its environmental impact in all its actions and actively promotes measures to reduce the related day-to-day impact of the administration and its work**

**Main outputs in 2022:**

### I. MORE EFFICIENT USE OF RESOURCES (ENERGY, WATER, PAPER)

Output	Indicator	Target
Raise awareness on paper use and paperless methods applied	Reduction of office paper consumption (2019 baseline)	Office paper consumption is reduced by 10%
	No. of staff informed	All staff informed
Participate in the end of the year energy saving action, (closing down EC-buildings during the holiday period) and take energy saving measures during summertime	Decrease of energy in 2 buildings (ORBN and CDMA) participating in the actions	-1% in total energy consumption (compared with 2019)
	% of staff informed	All staff informed
Raise staff awareness about energy savings and optimal water use	Number of new actions delivered	2 actions per year
	% of staff informed	All staff informed

### II. REDUCING CO2, EQUIVALENT CO2 AND OTHER ATMOSPHERIC EMISSIONS

Output	Indicator	Target
Reduction of air travel emissions produced by missions, experts, events and conferences	Mission budget reduction (2019 baseline)	25% budget reduction for missions by the end of 2022
	Experts and individual visits budget reduction (2019 baseline)	30% budget reduction for experts and individual visits by end 2021
	% of staff informed	All staff informed
Promote staff awareness actions about sustainable commuting	No. of new actions delivered	2 actions per year
	No. of staff satisfied with RTD bike parking facilities	50% of the staff participating into a survey
	% of staff informed	All staff informed



Raise staff awareness on digital work and efficient use of IT resources	Number of new actions delivered %. of staff informed	2 actions per year All staff informed
<b>III. REDUCING AND MANAGING WASTE</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Promote staff awareness actions about waste reduction and sorting	%. of staff informed Reduce waste generation (%) <i>(compared with 2019)</i> Increase waste sorting (%) <i>(compared with 2019)</i>	All staff informed 3% reduction of general waste (per building/person if OIB provides adequate info) 3% increase of sorted waste (per building/person if OIB provides adequate info)
<b>IV. SUPPORTING BIODIVERSITY</b>		
<b>Output</b>	<b>Indicator</b>	<b>Target</b>
Raise staff awareness on biodiversity promotion and protection	Number of new actions delivered %. of staff informed	2 actions per year All staff informed