Management Plan 2023

Joint Research Centre

Contents

INTRODUCTION

The Joint Research Centre provides independent, evidence-based knowledge and science, supporting EU policies to positively impact society. Being a service independent from national and private interests, the JRC builds trust by providing evidence to support the definition of policies – from their anticipation and design to implementation, monitoring and evaluation. The JRC operates a wide spectrum of scientific facilities and laboratories spread over five member states and six sites with a total workforce of around 3000. It supports and brings together Commission services to make sense of increasingly complex societal challenges. Together with policymakers the JRC analyses knowledge needs, frames research questions and provides tailor-made and interconnected approaches and solutions. The JRC also connects policymakers to a broad range of external stakeholders and citizens.

The management plan (MP) defines the activities planned for the coming year, following the structure of the multi-annual objectives of the strategic plan. It reflects the priority actions identified in the Commission work programme 2023.

The JRC's research programme and the other activities described in the Strategic plan 2020-2024 contribute to the European Commission General Objective 7 **'A modern, high performing and sustainable European Commission'**, with an intended impact of an enhanced image of the European Union due to solid evidence-informed policy making. The priorities and some specific mandates given to the JRC by the Commission have been translated into specific objectives (Figure 1).

In 2023, the JRC will continue to support almost all Commission services and policies with its scientific analysis. A particular focus will be on the work related to recovery and resilience, in particular as regards the strategic independence of the European Union and the Russian war of aggression against Ukraine, as well as on the Green Deal and the Digital Transition.

The JRC is continuing to modernise its business model and activities through an organisational transformation process, revitalising its Strategy 2030. It sets the ambition of becoming a leader in the orchestration of knowledge for policy and lays out a value proposition of anticipation, integration and impact, with the main vehicle for delivery being the portfolios in our work programme as from 2023. It also signals an increased openness to strategic engagement with the JRC's stakeholders, with a review and renewal of strategic partnerships.

The JRC will continue its cooperation with the Secretariat General on foresight, preparing the **2023 Strategic Foresight Report** which will focus on the social and economic factors of importance for the sustainability transition in the coming decades.

Following the positive outcome of the *ex post* evaluation of the JRC in Horizon 2020 and Euratom research programmes (2014-2020), the JRC will start implementing recommendations and at the same time proceed with the *interim* evaluation of the JRC in the Horizon Europe and Euratom research programmes (2021-2027).

Some activities are being discontinued to handle the budget constraints arising from the cuts in the Euratom budget. In addition, the lack of several association agreements to

Horizon Europe and to the Euratom Programme, high inflation and in particular the impact of rising energy costs on site operations, bring further risks. The JRC is taking mitigating measures such as the implementation of a new strategy in the area of its nuclear activities and measures to reduce costs and save energy, as detailed in specific objective 7.2.

The Intellectual Property Service will propose a policy on filing, registration and enforcement of European Commission brands for adoption by the College (specific objective 7.3).

The nuclear strategy will also affect the future activities under the decommissioning and waste management programme. In 2023, efforts to further reduce the nuclear liabilities on several sites will continue (specific objectives 1.1 and 1.2).

For details on the main outputs, please see the next sections and the performance tables in Annex.

PART 1. Delivering on the Commission's priorities: main outputs for 2023

EUROPEAN COMMISSION GENERAL OBJECTIVE 7

Figure 1 provides an overview of how the JRC's specific objectives relate to the Commission General Objectives (GO).

Figure 1. JRC support to Commission general objective 7. All of JRC's contributions to evidence-based policymaking are described under one specific objective (7.1). Given that the JRC manages sites and infrastructures, a specific objective (7.2) has been defined related to the goals of the JRC Strategy 2030. For its mandate to support intellectual property (IP) management in the Commission, a specific objective (7.3) has been defined.

Specific objective 7.1: The JRC supports evidence-informed policymaking through creating and managing high-quality and fit-for-purpose scientific knowledge

The main outputs for the year 2023 can be grouped into the following categories:

- Support to the Commission work programme (CWP) – The outputs will address policy priorities (summarised here under specific objective 7.1) and will consist mainly of studies and reports, but also methodological development and will address challenges under all political priorities.

- Support to the implementation of Commission policies in selected policy areas through monitoring, methodological developments, quality assurance tools, reference materials and standards, etc.

- Support to crisis management through operational regular and ad hoc support.

- Working with stakeholders and involving citizens more in the EU policymaking processes, including follow-up of the Conference on the Future of Europe (COFE) recommendations, the support to Member States and the implementation of the New European Bauhaus.

- Raising awareness on emerging or less-noticed issues, through high-profile reports and briefings. Support to Commission working methods, in particular better regulation and the data, information and knowledge management strategies.

Further examples are given under the different headings that follow.

Scientific excellence, impact and efficiency

Following the completion of the ex-post evaluation of the JRC activities under Horizon 2020 and Euratom Research and Training programme (MFF 2014-2020), the interim evaluation of the JRC under Horizon Europe and Euratom Research and Training programme programmes in the current MFF 2021-2027 was launched in 2022 and will be completed in 2023. The work of the independent experts will be supported inter alia with case studies on the impact of JRC's research. After having completed 60 case studies in 2021 and 2022, the aim is to complete another set of 5 in 2023.

The JRC's Scientific Development Programme, comprising the Centre for Advanced Studies, the Exploratory Research Programme and the Collaborative Doctoral Partnership, provide cutting-edge scientific input to emerging issues at the science-policy interface and thus contribute to ensuring future relevance of the JRC.

Scientific excellence requires proper research conduct and high standards of scientific integrity. The JRC's framework for scientific integrity and research ethics (SIRE) includes a number of instruments that help to ensure compliance with Horizon Europe and international standards. In 2023, the JRC Scientific Committee will revise the SIRE framework, evaluate the JRC's scientific excellence for the period 2016–2022 and further assess the need for guidelines and training on responsible conduct of research.

Responding to crisis and emergencies

We are in a time of crisis, economic uncertainty and diverse shocks. **Russia's war of aggression against Ukraine** is testing Europe's economic and social resilience at a moment when it is undergoing profound transformations. In this context, the JRC will gear its analytical capacity to the biggest evidence needs, in concertation with the Commission services responsible for developing new policies.

For example, the JRC will step up effort to support the strategic independence of the European Union with research on critical raw materials, supply chains for the twin transition, energy security including nuclear safety and security aspects, food security and foreign direct investment screening. Through the Observatory of critical technologies, led by the JRC, the Commission will contribute to building Europe's technological sovereignty and strategic autonomy in the important sectors of space, defence and security. On energy security, the JRC will assess the evolution of the gas market with a view to preparing for winter 2023-2024. It will also engage with the Member States and the regional risk groups to ensure a secure energy supply.

The chemical, biological, radioactive and nuclear threats triggered by Russia's war of aggression against Ukraine led to considerable concerns which require the JRC's expertise and support in addressing them. Several DGs (DG ENER, ECHO, INTPA, SANTE, HERA, MOVE and EEAS) joined in a Task Force led by DG ENER. The visibility of JRC work in fields of nuclear safety and CBRN matters increased. The JRC also reprioritised its activities, in particular on modelling of nuclear accidents and related matters, nuclear safety assessments of incidents (Tchernobyl, Zaporizhzhia and other Ukrainian NPPs and nuclear facilities, including nuclear waste). JRC, in collaboration with the Ukraine Technical Support Organisation (State Scientific and Technical Center for Nuclear and Radiation Safety of the State Nuclear Regulatory Committee of Ukraine), analyses experiences from operation of nuclear power plant under war conditions. Together with WENRA (Western European Nuclear Regulators Association), the JRC developed closer collaboration on nuclear emergencies and modelling of nuclear accidents.

The recent crises have revealed various challenges at the science-policy interface, such as dealing with scientific uncertainty, disinformation, contestation of expert authority, and a lack of coordination and cooperation between different advisory organisations and networks within and between Member States. Addressing these challenges requires a comprehensive analysis and the need for policy makers to make best use of the available scientific knowledge. In 2022, the JRC co-lead – with DG RTD – the Commission staff working document: Supporting and connecting policymaking in the Member States with scientific research (SWD(2022) 346 final) strengthening the role of the scientific research in policymaking. In 2023, the JRC will work on science for policy with relevant stakeholders, including the Member States.

Through knowledge centres, such as the Disaster Risk Management Knowledge Centre (DRMKC), the JRC established science-policy networks that are instrumental in crisis and emergencies. In particular, the JRC will work with the Member States to implement the science pillar of the Union Civil Protection Knowledge Network and integrate it into the foundations of the DRMKC. JRC's early warning systems, such as for floods, wildfires and droughts, crop yield forecasting and agricultural production anomaly detection and the

global disaster alert and coordination systems help Members States and third countries prepare for disasters and manage crises worldwide.

The JRC will also support, from the socio-economic perspective, the monitoring of the implementation of the national recovery and resilience plans and the future contributions to the European Semester. JRC will offer policy-based evidence on several analytical dimensions including territorial and socio-distributional aspects, thematic / sectoral focus, ex-ante and ex-post impact assessment. A strategic approach for monitoring the implementation of the national recovery and resilience plans and future contributions to the European Semester is being developed. This includes work on the resilience dashboards which, in the 2023 European Semester, will be featured in a dedicated Annex, and on forecasting, using on a macro-economic model (the Global Multi-Country model) developed by DG ECFIN and the JRC. In the context of strategic foresight, the resilience dashboards assess resilience as the ability to make progress towards policy objectives amidst challenges. Key areas for future contributions include tax and benefits systems, territorial development, place-based innovation, productivity, education and skills, the impact of the digital and green transitions, and monitoring the socio-economic and geopolitical dimension of resilience building through the resilience dashboards.

Working with stakeholders

The JRC is focused on stakeholder value and uses its convening power for better integrated EU policies and policymaking.

2023 will see the implementation of the action 'Relations with stakeholders' of the revitalisation of the JRC Strategy 2030, focused on giving increased priority to relations with stakeholders at strategic and portfolio levels.

The strategic cooperation will notably concern:

- The other Commission services. To this end, in 2023, the JRC will continue the dialogue started in January 2022 with clusters of Commission services. The portfolios of the work programme will be an important vehicle to further enhance the cooperation and communication with other Commission services. They will also allow a better integration across scientific and policy domains in order to maximise support for anticipating new challenges, developing policies and monitoring their implementation and impact.

- Inter-institutional cooperation, where JRC aims to support EU-level policymaking through close and positive exchanges with the European Parliament fora, notably the Panel for the Future of Science and Technology (STOA) and policy committees, with the Council and the Council Presidency, and the Consultative Committees through, in particular, a structured and fruitful collaboration with the European Committee of the Regions.

- Stakeholders in Member States, EU regions, and countries associated to Horizon Europe, in line with the EU's priorities. It will provide access to vast amounts of data

at country and regional level and to models, and facilitate the exchange of expertise, knowledge and best practices.

- An active dialogue with its Board of Governors and the network of National Contact Points (NCPs) in Member States and associated countries. The network will inform public entities and scientific communities about JRC's latest initiatives, events and opportunities for collaboration with JRC. Following the analysis of the NCP's networking, an action plan for the JRC NCPs network activities 2022-2024 will be rolled out to strengthen collaboration and further structure the JRC NCP community.

- International cooperation, as well as the engagement in Team Europe Initiatives and science diplomacy, supporting the implementation of the Commission Communication on the Global Approach to Research and Innovation. The JRC will prioritise strategic partnerships that deliver real value and work with the broader community of knowledge brokers to share and strengthen its own capacity to ensure that science delivers for EU policy.

Communication

As the science and knowledge service of the European Commission, the JRC's communication activities aim to:

- bridge science and policymaking by communicating scientific findings in an understandable way, in support of EU policymaking;

- facilitate dialogue and staff engagement within the JRC;

- foster external recognition of the Commission's political priorities by underpinning their credibility;

- position the JRC as a world-class scientific organisation and reaching out to citizens, scientists, journalists and other stakeholders.

To reach these aims, the JRC will make full use of a diverse portfolio of communication and dissemination channels, ranging from academic articles intended for scientists via publications and events targeting policymakers, to a rich online offering of news, virtual content and social media. It will apply innovative methods of communicating and engaging with the public, including novel citizen engagement techniques.

The JRC will continue to work closely with other Commission services, including the Directorate-General for Communication, to leverage synergies and contribute to common projects.

Moreover, the JRC will pursue its advisory role on issues such as dis/misinformation, behavioural sciences, science for policy as well as citizen engagement. It will contribute to important corporate communication campaigns, for example on NextGenerationEU and the New European Bauhaus initiatives.

Key priorities in 2023 will be to:

- further develop one single JRC communication community, involving all relevant partners;

- move towards a pro-active and strategic approach, emphasising anticipation, integration and impact of the JRC's work;

- support the JRC's new approach to policy support via portfolios with communication advice and activities;

- manage the communication aspects linked to the transition towards a new intranet;

- launch new initiatives to measure the efficacy and impact of the JRC's communication initiatives.

The JRC will leverage the unique opportunities presented by its world-class scientific infrastructure throughout Europe to offer open access for researchers as well as on-site and virtual visits and events to highlight the contribution of its scientific work to stakeholders and individuals, including through its new Visitors' Centre in Ispra (Italy), the Science Experience.

It will continue to encourage and train scientists to act as communicators and bridge the gap between science, policymaking and citizens through tailor-made courses and tools produced for the JRC Clear Writers' Network and the EU Academy's e-learning platform, and participation in TEDx® events and Art & Science workshops.

The quality of JRC scientific publications will continue to be promoted through internal peer reviews, carried out by the JRC Editorial Review Board, as well as external ones, in the case of peer-reviewed publications.

Supporting the Commission's political priorities and the Work programme 2023

The JRC will support new initiatives, as well as monitoring and implementation of initiatives adopted in the first years of the Commission's mandate across the six headline ambitions, most prominently the initiatives linked to the green and digital transitions. Below are examples of the JRC support to the Commission work programme (CWP) 2023 and other important initiatives.

The European Green Deal

- **Revision of EU's internal electricity market rules**. The JRC will assess the impacts of the revision of the internal electricity market rules through its energy system modelling toolset. It will, for example, assess how consumers might benefit from alternative/improved pricing rules, as well as from adjusted renewable

remuneration schemes that allow consumers to profit from low-cost renewable energy.

- **Revision of waste framework directive.** The JRC will contribute to this revision through feasibility assessments for waste management targets for selected waste streams, for instance for textiles waste. It will also develop policy options for specific targets on the preparation for re-use and recycling of textile waste, taking into account the expected economic, social and environmental impacts of each option. It will furthermore identify best waste collections practices and assess their economic, social and environmental benefits, as well as assess the sustainable management of waste oils. The JRC has already done preparatory work on food waste, in particular quantification of food waste, and on the assessment of food waste prevention actions, which will allow formulating policy options departing from a baseline of current food waste.

- **Legislation on new genomic techniques.** After contributing to the impact assessment in 2022, JRC will develop case studies of plants derived by certain new genomic techniques that will analyse their potential contribution to a sustainable agri-food system and assess, where possible, their potential economic, environmental and social impacts. The case studies include a focus on crops designed to reduce pesticide use in the EU, to improve citizens' lifestyle and nutrition and to help food security.

- **Revision of animal welfare legislation**. The JRC will support the impact assessment of the revision of the animal welfare legislation. It will inter alia run models for simulating market effects related to production cost impacts and conduct a literature review on consumers' attitudes toward animal welfare food labelling and on willingness to purchase.

- **The legislative framework on sustainable food system.** The JRC will work on the impact assessment in close cooperation with the Directorate-General for Health and Food Safety (responsible for the file), as well as the Directorates-General for Agriculture and Rural Development, Environment and Maritime affairs. The JRC already provided its initial findings in an interim report in October with the final report due in December 2022. As of 2023, the JRC will start developing a comprehensive monitoring system to assess the development of the EU food system, including the objectives and the targets of the Farm to Fork Strategy.

- **Initiative on protecting, sustainably managing and restoring EU soils.** The JRC supports the impact assessment of this initiative with scientific evidence. It also provides the scientific rationale for the key articles of the initiative, including legal definitions, indicators and thresholds and formulation of the framework for monitoring and reporting. The JRC will support the development of provisions on contaminated sites identification and support the development of an EU priority list for contaminants of major and/or emerging concern that pose significant risks for European soil quality. The JRC will establish a methodology and relevant indicator to assess the extent of desertification and land degradation in the EU.

- **The Ecodesign for Sustainable Products Regulation** (ESPR). The JRC will develop a work plan of priority products for ESPR. Furthermore, it will work on the product group 'Textiles' as the first pilot under ESPR, providing input to the revision of the textile labelling regulation. It will also develop the methodological frame for the ESPR.

- The JRC will also be engaged in the implementation of several policy initiatives adopted in previous years, including the hydrogen strategy, the EU forest strategy for 2030, the EU strategy on adaptation to climate change

A Europe fit for the digital age

- **European critical raw materials act.** The JRC will support the identification of critical and strategic materials, especially through foresight and supply risk analysis along the complete supply chain. The JRC will also contribute to analyse the systematic monitoring and the setup and operation of an early-warning mechanism to anticipate supply risks, will assess the potential of materials, technology substitution and the promotion of circularity. The Raw Materials Information System (RMIS) will support the policy measures for monitoring, risk management and governance in the field of critical raw materials. The JRC will also update its 2020 Foresight Study on Critical Raw Materials for Strategic Technologies and Sectors, which will accompany this act and extend it to strategic technologies for the European economy, covering and providing evidence on renewables, e-mobility, energy intensive industries, digital and space/defence.

- The **Digital Services Act (DSA)** gives the European Commission exclusive supervisory and enforcement role over transparency obligations concerning algorithms used by Very Large Online Platforms and Search Engines. These have an increasing control over the online content, with societal and ethical impact. To support its role, the European Centre for Algorithmic Transparency (ECAT) will be set up, hosted by the JRC in close cooperation with DG CNECT. The ECAT will act as technical and scientific support service of the Commission when acting as regulator under the DSA, and will perform research around algorithmic systems and their transparency. The ECAT was launched in November 2022 and will gradually take up its functions during 2023.

- **Screening and registration of asbestos in buildings**. The JRC will support the new legislative proposal on asbestos screening and registration in buildings by investigating, in the context of the Renovation Wave Strategy, the wider benefits of coordinating energy efficiency upgrades in existing buildings with asbestos removal and specifically including regions under high seismic risk.

- **European Research Area (ERA)** – Research and infrastructures for the green/digital transition. The JRC will support the development and Implementation of ERA Action 12: Accelerate the green/digital transition of Europe's key industrial ecosystems, in particular on the role of technology infrastructures and on the

contribution of standardisation to the valorisation of research and innovation within the framework of the industrial technology roadmaps. The JRC will also help regions design and implement innovation strategies, provide targeted support to enhance their innovation ecosystems, and improve technology transfer.

An economy that works for people

- **Business in Europe: framework for income taxation.** The JRC will contribute to the impact assessment accompanying the initiative. Using an applied general equilibrium model, the JRC will provide analyses of the macroeconomic impacts of key elements of the proposal, including reduced tax compliance costs, a common tax base and allocation of corporate profits and losses to the jurisdiction in which the corporation has a taxable presence.

- **Digital Euro.** The JRC will contribute to the impact assessment of the digital euro. It will provide estimations on the potential impact of the introduction of central bank digital currency on banks under different scenarios. It will analyse the possible macroeconomic impact of introducing central bank digital currency with a dynamic stochastic general equilibrium model developed. And, it will contribute to technical aspects of digital euro, including cybersecurity of block chain (distributed ledger).

- **Economic governance review.** The JRC will provide analytical support to enable the renewed Stability and Growth Pact and underpin the associated macro-economic and fiscal surveillance, in light of the post-COVID recovery and the green / digital transition. Its macro-econometric analytical tools help monitor macro-economic and fiscal stance and the impact of shocks. A wide range of forecasting and nowcasting models allows for more timely assessments of economic effects of policies.

A stronger Europe in the world

- **EU space strategy for security and defence.** The JRC will provide scientific support for secure navigation and communication capabilities, including for developing defence-grade secure navigation capabilities (Galileo PRS Public Regulated Service). It will also analyse value chains of selected critical technologies for defence, space and related civil industries, to identify existing or potential gaps and dependencies.

-

- The JRC will use its scientific networks outside Europe as avenues for **science diplomacy** and to support Europe's commitments on the global and multilateral systems and the implementation of the EU's international policy objectives. The ongoing JRC support to the United Nations Convention on Climate Change, Biological

Diversity and Combating Desertification, as well as to the Non-Proliferation Treaty, the Comprehensive Test Ban Treaty and the UN Sendai Framework enables the definition of international requirements and standards and increases partnerships at the global scale.

- **Global Gateway**. The JRC will provide support to the Strategic Corridors initiative in Africa and more in general to the Global Gateway and to its intersection with the Innovation Agenda. The integration of scientific evidence from a variety of sectors with a regional targeted focus will ensure a more coherent policy development/implementation and optimise impacts.

- **Good governance: Monitoring the capacity of Western Balkans to tackle organised crime and corruption.** In order to support the capacity of Western Balkan partners to collect data in a consistent manner and to identify trends, the JRC will support the development of a new e-platform with data on investigations, indictments and convictions related to organised crime and high-level corruption.

- The JRC will contribute with technical support, including training and capacity building activities. to the **implementation of several international agreements concerning nuclear security, safeguards and non-proliferation** including, where appropriate, the Iran nuclear agreement, nuclear safeguards and security research and development (with Japan and the USA), the EU CBRN Centres of Excellence and the EC support to the International Atomic Energy Agency in the area of nuclear safeguards and nuclear security.

Promoting our European way of life

- **Revision of the combating child sexual abuse Directive.** The JRC will develop new digital forensic techniques in support of law enforcement authorities. These techniques aid in processing large amounts of multimedia data, with the aim of helping investigators geo-localise where a video was made, and to stamp Child Sexual Abuse multimedia products found in the Darknet. JRC will also work in collaboration with EUROPOL on the deployment of technical tools such as Electric Network Frequency (ENF), based on automated image analysis, to detect and trace abuses.

- **Digitalisation of travel documents and facilitation of travel.** The JRC will operate the three public key infrastructures (PKI) required for the security of the EU laissez-passer (LP) and continue the tests on the certificate exchanges enabling access to fingerprints aimed at full interoperability with member states (SPOC). In addition, the JRC will develop multi-platform applications to support the verification of the authenticity of the new visible digital seal (VDS) on the Schengen visa and will operate the Schengen Master List Signer and Schengen Master List.

- **Engaged Education for Climate and GreenComp communities.** In support of the green and digital transitions through education, the JRC provides the conceptual

expertise and capacity-building to manage and run the Education for Climate Coalition and a community of practice on GreenComp together with the Directorate-General for Education, Youth, Sport and Culture to coordinate community management competences and sustain and animate a social collaborative online platform for citizen engagement around green education to co-create tangible sustainability education solutions.

- **Strategic Agenda for Medical Ionising Radiation Applications (SAMIRA).** The JRC has been involved in the drafting and implementation of SAMIRA since the start and is integrating the collaborative work in the different aspects of medical radionuclide research (Euratom direct and indirect actions), quality and safety, capacity building and policy support.

- In December 2022, the EU adopted its **Global Health Strategy** with a call from the Council for "increased ambition". At the same time, the EU is actively building the European Health Union and implementing Europe's Beating Cancer Plan. JRC will contribute with its expertise in disease prevention, health promotion and new health technologies.

- **Advances and development of targeted alpha therapy to treat cancer.** JRC will support Member States and the International Atomic Energy Agency with capacity building and technology transfer for the development, production, and quality control of new generation of therapeutic radiopharmaceuticals. It will reinforce the advances made in the preparation and clinical application of alpha-emitter radiopharmaceuticals, especially based on actinium radioelement.

A new push for European democracy

- The JRC will develop its advanced AI-based tools for **disinformation** detection. Building on previous work on the potential causality between online technologies and political behaviour, it will seek to understand the ramifications of different communication strategies, reflecting upon the extent that public institutions can meaningfully and ethically communicate using values, narratives, metaphors and frames as well as causal reasoning. It will carry out research to improve evidence-informed policymaking, developing practical toolkits to factor values and identities in the process, while nurturing science-policy ecosystems through active networking and capacity building at national and regional level.

- To help fulfil the President's strong pledge for an institution capable to communicate with citizens to engage them in the political debate, the JRC will provide methodological toolboxes and protocols for **citizen engagement** initiatives, to be deployed, *inter alia,* in support of the Conference on the Future of Europe and the Horizon Europe Missions.

- **Defence of democracy package.** The JRC has various lines of work to inform the initiatives that will be developed under this package, including: (i) work supporting

the security of the Union, to enhance the EU capacity for the prevention, detection and response to conventional and evolving hybrid including cyber threats, and to better anticipate further hybrid threats to the democratic institutions, as well as to assess sectoral resilience baselines to identify gaps, needs and steps to address them; (ii) experience in supporting the foreign direct investment screening; (iii) work on digital platforms, including monitoring cross-border internet traffic, circulation of hate speech and other illegal content, (iv) work on disinformation, media reporting and sentiment analysis; and (v) supporting the review of the European Democracy Action Plan, by providing potential recommendations for deliberative democracy and other formats of citizen participation in Member States at all levels of governance.

Better Regulation

The JRC continues to be centrally involved in implementing and innovating the **better regulation** agenda. It offers methodological advice, training and IT solutions to policy DGs on evaluations and impact assessments (an overview is given in Figure 2). The aim is to provide this advice early in the policy making process. To this effect, the JRC and the Publications Office are piloting a Better Regulation Evidence Transparency Service as part of the rolling action plan for the Data, Information and Knowledge management at the European Commission, and the JRC participates in the upstream meetings with the Regulatory Scrutiny Board.
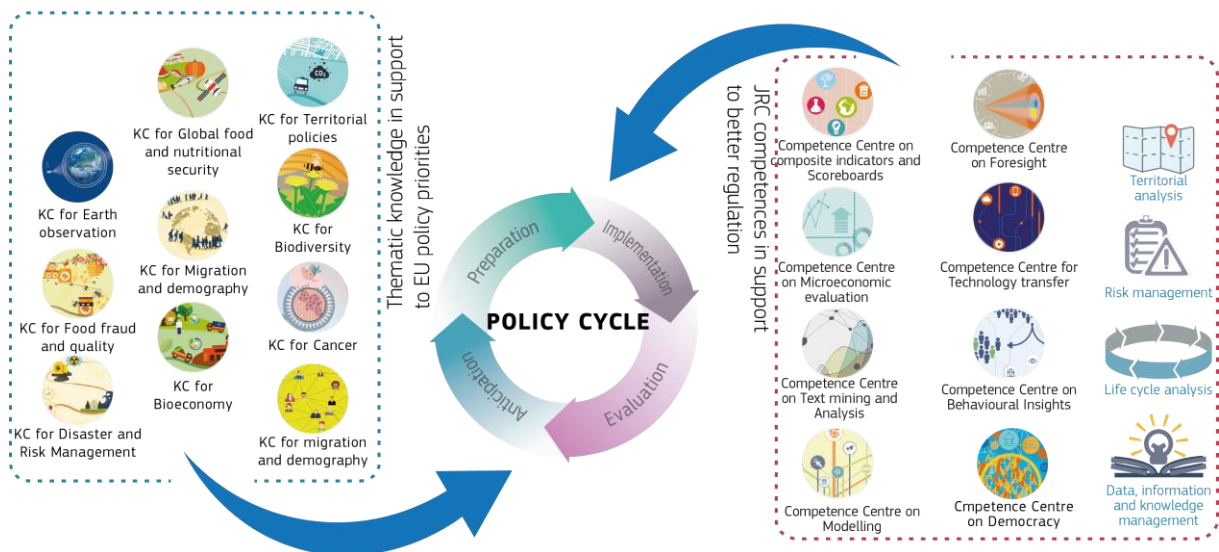

Figure 2. Examples of JRC's role in support to the policy cycle. The various competence and knowledge centres in the JRC provide competences and thematic knowledge to the policy cycle.

The JRC is helping the Commission in its ambition to put strategic foresight at the heart of the EU policy process. The Competence Centre on Foresight provides strategic and future-oriented input to help policymakers better anticipate and thus mitigate possible vulnerabilities, strengthen the capacities, open new opportunities, and overall enhance the EU's long-term capacity and freedom to act.

A key activity is the JRC support to the **Commission Communication on the 2023 Strategic Foresight Report**. The Strategic Foresight Report 2023 will build on previous reports (Twin Transitions, Strategic Autonomy, Resilience) and focus on the social and economic factors of importance for the sustainability transition in the coming decades. The JRC-led inclusive participatory foresight process underpinning this report will explore Europe's possible future pathways towards sustainability from a systemic perspective. The JRC will employ a range of well-established foresight tools to identify key factors and critical areas of intervention towards achieving a sustainable EU ensuring a global position of leadership. The JRC will produce a JRC Science for Policy Report summarising the factual results of the foresight process.

The effective management of data, information and knowledge is vitally important to ensure that policy is based on the best available data and information. However, data and knowledge remain scattered and the acquisition of new data and generation of new knowledge needs to be well coordinated. The JRC will contribute to the **Commission's data, information and knowledge strategies** and offer tools, advice and support to facilitate knowledge sharing and collaborative working.

An example is the **Composite Indicators and Scoreboards Explorer**, an innovative JRC tool that brings hundreds of composite indicators and scoreboards just a click away to help the Commission at developing sound and relevant indicator frameworks to underpin its strategies and action plans, by:

- helping to assess EU progress towards the social, economic, digital and green goals;

- facilitating, among others, the European Semester process;

- providing flexibility in exploring interactively various sets of indicators in the context of policy labs or other brainstorming or exploratory meetings;

- helping to bring coherence in the design of future or revision of existing composite indicators and scoreboards.

In addition, the JRC will issue a series of **country-focused policy briefs** and data stories. To support anyone from the EU institutions who wishes to navigate in the world of composite measures, the JRC will continue organising workshops in the form of Explorer Story Labs. In addition, every year, a JRC major event takes place on the occasion of COP, the UN Climate Change Conference, in which JRC launches updated releases of the abovementioned tool, including new features and functionalities.

Reinforcing links across EU policies contributes to a more coherent and hence more impactful policy frame. The Knowledge Centre for Earth Observation contributes to the identification of synergies across policies by translating specific policy needs into technical requirements for **space data**. This effort done collectively by 17 Directorates General of the Commission allows the identification of synergies across policies and their mutual reinforcement.

Specific objective 7.2: The JRC operates modern, sustainable and open access research campuses

Unlike other DGs and Offices, the JRC owns buildings and related infrastructures on five Commission sites (Geel, Ispra, Karlsruhe, Petten and Seville[1]) and it is therefore directly in charge of managing them. Support services include all activities related to infrastructure development and maintenance, energy and water management, logistics, transport, and certain aspects of safety, security and environmental protection. The JRC Strategy 2030 set as a goal 'an internationally recognised, modern, safe and secure infrastructure for the JRC, which creates a positive working environment'.

In 2022, following the reduction of the Euratom budget, the increased cost of energy and the inflation, all JRC major investments have been reprioritised according to the JRC strategy enhancing the modernisation and the energy efficiency of its infrastructures.

In 2023, the JRC will continue to implement energy saving measures in response to the Commissions goal of reducing electricity and gas consumption by 15% during autumn and winter. In the light of the steep increase of energy costs and the significant inflation it is of vital importance for the JRC to take decisive measures in this area given the substantial budgetary impacts. The JRC will be faced with the need for savings on the one hand and the need for investments in its ageing infrastructure on the other. Its ambition remains to have:

- Secure infrastructures and installations – construction of a new security entrance building in Petten.

- Smart eco-friendly sites, with focus on improving insulation, increasing internal production of renewable energy as well as renewal of the tri-generation plant in Ispra.

- Modern fit-for purpose infrastructures covering the refurbishment of office and scientific buildings – study for a new near-zero energy consumption office building in Seville.

- Timely delivered and efficient site services.

In 2023, the JRC will continue to provide open access to selected physical research infrastructures to the research community, public authorities, SMEs and industry to enhance scientific knowledge dissemination, boost competitiveness, bridge the research-industry gap, provide training and capacity building and bridge the innovation gap.

---

[1] Rented building

Specific objective 7.3: The Commission has appropriate capacity to manage risks related to intellectual property rights and be compliant with the rules and regulations

The EU owns many intangible assets, protected by intellectual property (IP) rights, ranging from publications to software, to datasets, to technical inventions, to signs. In their daily work, Commission staff may have to use IP assets, owned by third parties. The Commission aims to facilitate further use (and reuse) of EU owned IP assets and to ensure compliance use of third party owned assets by Commission staff. As rules on IP are not always straightforward or easy to understand, it is necessary to give clear guidance on the management of IP assets to Commission staff, thus contributing to a modern, high performing and sustainable European Commission. In 2023, and together with the IP correspondents' network and Legal Service, the JRC will further facilitate appropriate IP management at the Commission, alleviate administrative burden in relation to IP procedures, and provide standard clauses and templates. It will continue its IP management awareness raising activities, the promotion of the EURECA IP management platform and the provision of legal advice on matters related to IPR.

EUROPEAN COMMISSION GENERAL OBJECTIVE 1

Figure 3 provides and overview of how the JRC is structuring its work and setting specific objectives in support to Commission GO1.
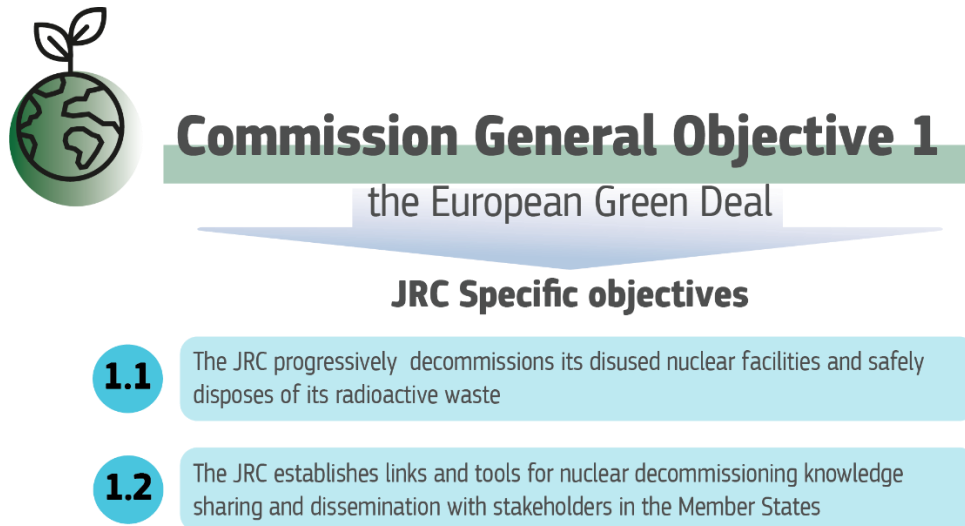

Figure 3. JRC support to Commission general objective 1.

Specific objective 1.1: The JRC progressively decommissions its disused nuclear facilities and safely disposes of its radioactive waste

Decommissioning and waste management are an integral part of the life-cycle of JRC's nuclear research facilities; they fulfil the final aim of returning the land used to a 'green-field status'. The nuclear Decommissioning and Waste Management Programme (D&WMP) of the JRC entails a complex set of specific activities and projects with related objectives.

JRC decommissioning activities are included in a new instrument under the Multiannual Financial Framework 2021-2027, the 'Nuclear Safety and Decommissioning Programme'; furthermore, the establishment of Directorate J dedicated to these activities, separate from research activities, is facilitating the implementation of the programme in line with its operational character, as proposed by external experts.

Different levels of advancement/implementation characterise the situation at the four nuclear sites of the JRC. In Ispra, most of the nuclear facilities ceased to operate before 1999 and there is a well-established organisational structure implementing the programme, while establishment of such a structure in the remaining JRC sites is at an embryonal stage. The objectives include safe conservation, pre-decommissioning, decommissioning and waste management covering a variety of obsolete large installations.

In 2023, progress In Ispra on the three main work streams (nuclear material and waste management as well as decommissioning) will include important activities in licensing for off-site radioactive waste treatment services, the completion or upgrade of important waste pre/treatment facilities, advancement on the treatment of nuclear material,

decommissioning activities in the Essor complex and the submission of the license application for the decommissioning of the Essor reactor.

In Karlsruhe, the expected progress will include further preparation of glove boxes for dismantling, increasing amount of low-level waste characterised, and further development of a long term decommissioning concept for the nuclear facilities.

In Petten, a framework contract with the Dutch operator (Nuclear Research and Consultancy group) to remove and dispose the historical waste still present on site has been established and the first specific contract is expected in 2023.

In Geel, based on the established inventory of nuclear material, transport options for removal of the material will be investigated in order to perform transports in 2023.

Specific objective 1.2: The JRC establishes links and tools for nuclear decommissioning knowledge sharing and dissemination with stakeholders in the Member States

Knowledge sharing is the second component foreseen in the Commission proposal for the nuclear D&WMP of the JRC under the new Multiannual Financial Framework 2021-2027. The main activities for 2023 will be the production and distribution of several knowledge products (such as documents), and the progressive consolidation of a dissemination platform.

PART 2. Modernising the administration: main outputs for 2023

The internal control framework [2] 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.

The JRC 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 new internal control strategy is planned to be developed (which was put on hold pending a re-organisation to take effect from 2023).

A. Human resource management

The JRC aims to recruit, train, motivate and retain highly qualified staff to ensure the effective and efficient operation of the DG, as well as the promotion of equal opportunities and diversity. In line with the corporate Commission HR Strategy, JRC is developing its 'HR Pathways', setting the main priorities for HR and people management for the coming years. Recruitment, diversity and staff development are the cornerstones of this plan. In addition, the **JRC equality mainstreaming plan** addresses how the JRC, as an organisation, applies the highest standards in terms of equality for its staff, and supports diversity and inclusion.

For recruitment, actions planned aim to attract highly skilled and qualified staff at all JRC sites, to enhance diversity of JRC staff, focusing mainly on gender balance and geographical diversity. This will be done through increased outreach (e.g. via an "ambassador" programme, use of social media etc.), awareness raising workshops with recruiters and selection panels as well as systematic and detailed reporting on our progress in reaching diversity targets. Particular attention will be given to enhance the gender balance of potential future management staff through recruitment and selection.

JRC will continue developing its talent management and career development programmes to cover strategically important competence areas throughout 2023. The successful JRC Accelerated Talent Management programmes will continue as a main learning and development objective. Although open to all AD staff with management potential, particular priority will be given to encourage female participants. JRC will also actively participate in the corporate Female Talent Development Programme of DG HR.

---

[2] https://commission.europa.eu/system/files/2018-10/revision-internal-control-framework-c-2017-2373_2017_en.pdf

In line with the Commission Decision of 30/09/2020 regarding complementary measures to improve gender equality at management level, JRC has appointed a deputy to the Director for each of its Directorates. In addition, the JRC continues to select and appoint deputy Heads of Unit to ensure each Unit will have a deputy following the adoption of the new organisation structure, respecting gender balance. The JRC will also continue to engage in the promotion of management careers amongst its female AD population and support them with specific talent management programmes as mentioned above as well as development initiatives such as enhanced access to accredited coaches within the Commission coaching programme. JRC currently has 20 female middle managers (33%), a significant increase in comparison to the baseline of 1st of December 2019 when it had 14 (22%).

2023 will also mark the entry into force of a new organisational structure of the JRC in order to better align it with its core ambition of anticipation, integration, impact and to equip it for the upcoming challenges. This organisational transformation goes hand in hand with the culture transformation based on the portfolio-centred approach for the JRC's work programme that underpins the ambition of increased cross-directorate collaboration in order to obtain a more holistic and integrated scientific support for policy.

The latest Commission wide-staff opinion survey took place towards the end of 2021. To enhance the positive trend in staff engagement and maintain the high level of staff well-being, this survey will be followed up on the basis of action plans which were elaborated by dedicated working groups at each site in 2022. The aim is to further improve e.g. the staff engagement index (baseline 71% in the 2021 survey). The majority of the actions proposed are focussed on better internal communication, especially between staff and their hierarchical superiors, providing additional guidelines to managers on their role in staff well-being and development.

With the **Collaborative Doctoral Partnership**, the **Exploratory Research Programme** and the **Centre for Advanced Studies**, the JRC is complementing its competence base with motivated experts, postdoctoral researchers and doctoral candidates from specific thematic fields relevant for upcoming science and policy challenges.

B. Sound financial management

During 2023 the JRC will continue to pursue the initiative of mandatory financial training as a prerequisite to the appointment of operational actors in the financial and procurement processes. A set of training sessions delivered by JRC specialised trainers covering EU procurement, rules and processes for operational staff is under preparation to ensure non-specialists understand their role and responsibilities when using EU money.

The training suite will be delivered in person or online and will cover subjects as broad as expenditure lifecycle, anti-fraud, market research, the writing of technical specifications and

evaluation criteria. Each of the courses will be followed by a multiple-choice questionnaire that will require at least 70% to pass.

A 'license to buy' will then be issued once the candidate has shown they have understood the training as attested by passing the tests. The license will be modular so that actors can increase the scope as they wish and will be mandatory for all JRC operational actors involved in procurement.

The eProcurement programme continues to be managed by the JRC on behalf of the Commission and the outlook for 2023 is viewed positively (see part F. below for further details).

C. Fraud risk management

Fighting fraud is a top priority for the JRC since 2012. The JRC anti-fraud strategy (AFS), last revised in 2021, and related action plans have been designed, implemented and assessed to ensure a zero-tolerance-approach. The JRC also provides technical and scientific support to other Commission DGs in their fight against fraud in cooperation with OLAF[3].

The current JRC anti-fraud strategy is written in accordance with the Commission AFS (CAFS[4]) and focusses on two of the CAFS prioritised objectives; 'data collection and analysis' and 'coordination, cooperation and processes'. Its aim is to achieve a good governance structure with clear roles and defined methodology for data analysis and information exchanges, covering both financial and non-financial aspects. All but one of the ten actions in the current JRC AFS action plan have now been completed. Five of these actions are continuous actions that will thus continue during 2023, such as regular trainings for financial agents, implemented tools and procedures, improved reporting, etc. The JRC also continues to participate in specific OLAF subgroups, providing its expertise in data analysis and indicator definition, especially in the context of research, trainings, and management system integration.

In 2023, a new JRC AFS action plan will be developed based on the new CAFS action plan that is currently being drafted. Relations with other services through the FPD Network will continue to ensure cooperation also on training supply and fraud risk assessment and management.

D. Digital transformation and information management

---

[3]   European Anti-Fraud Office

[4]   https://ec.europa.eu/anti-fraud/sites/antifraud/files/2019_commission_anti_fraud_strategy_en.pdf

The JRC will pursue six main lines of activities in line with the strategic objectives of the corporate digital strategy[5]:

- further development of the e-procurement solutions enhancing **business-driven transformation**;

- implementation of the ICT architecture and further strengthening the ICT governance process ensuring a **secure and resilient infrastructure**;

- implementation of the JRC's part of the Rolling Action Plan for Data, Information and Knowledge Management 2023-24, empowering **data-driven** policy support;

- implementation of JRC Data Strategy initiatives on governance, infrastructure, culture, Data Support Service and Data Science Community fostering a **digital culture**;

- implementation of data protection rules enhancing **openness, transparency and privacy**;

- a sound records management in compliance with the e-Domec policy promoting a **seamless digital environment**.

Digital transformation

The JRC is the business owner for e-procurement. The new e-procurement corporate solution currently being built and already partially in production is based on the proven practices and solid architecture of eGrants. The solution aims to be fully integrated, automated and paperless, covering the whole e-procurement end-to-end process, with a high user experience and full integration with the financial and accounting processes. This effort will support the stronger corporate information landscape. For more information on the e-procurement project plans for 2023 please refer to section 2F.

A future-proof, end-to-end ICT architecture is currently being implemented that defines capabilities aligned to business needs and supports the JRC 2030 strategy and the transition to a secure and resilient infrastructure. This architecture aims to ensure a cost effective, fit for purpose, secure and well-coordinated ICT environment. A number of projects were defined and in 2023, concrete results are expected to further improve the security of the JRC network (reinforced system security evaluations, consolidation of existing specific JRC networks, design of a specific JRC network), and to promote the use of the virtual desktop facility to as many users as possible (as an alternative to powerful workstations and for isolated development environments). The implementation of the single specific network the design of which was finalised in 2022 will be started. This will allow to phase out the different existing scientific networks. The consolidation of the scientific infrastructure (user domains management -including user support, storage and back-up

---

[5] European Commission Digital Strategy (europa.eu)

services, server virtualisation, data base management and hosting of information systems) will be continued. The ICT governance process involving the scientific users and the senior management in the consolidation process will be pursued.

The JRC continues to systematically support the principles of the digital strategy and sound architecture when assessing JRC ICT projects through the JRC ICT Programme Office, ensuring that both the 'Dual Pillar Approach' and the 'solution design guidelines' are followed. Tools used for daily work and collaboration include: 1) alignment with the corporate choices made for collaboration tools taking into account JRC's specific needs; 2) all the preparatory work to deploy 'Welcome' in the JRC by Directorate-General for Informatics including the transfer of the management of the physical network of the JRC to Directorate-General for Informatics.

In the re-organisation of the JRC as from 2023, specific attention is devoted to strengthen the corporate data management structure and governance in the JRC. A data architecture will be developed for the JRC and the appropriate actions to implement this architecture will be initiated.

Regarding collaboration tools, the JRC is committed to phase out CONNECTED in 2023 and migrate to the corporate Single Integrated Framework for Collaboration built around Microsoft 365 (M365).

Information and IT security rules

The JRC will continue to collaborate intensively with DIGIT.S to monitor and improve its ICT security capability and maturity. In view of its specificities, the JRC will continue to invest in ICT security. The JRC is making a huge effort in order to finalise the security risk assessment and security plans and will revise them regularly. Also a lot of attention is devoted to compliance with security and the use of 2 factor authentication and EU login. The JRC is fully committed to fulfil the objectives related to ICT security set up by the ITCB for not only JRC information systems and infrastructure, but as well concerning services and systems procured from external suppliers, as well as the security of any external accesses to Commission information systems and data. All these initiatives are closely monitored by the JRC ICT Executive Committee and JRC Senior management through dedicated Key Performance Indicators. Those indicators cover all important IT security aspects including Security plan coverage, compliance toward IT priority controls, Security incident and Awareness raising.

In 2023 the JRC will also continue to contribute to the Commission corporate ICT Security awareness-raising campaign. Like in 2022, this will be done through the promotion of the existing corporate initiatives and the creation of a complementary Cyber awareness-raising offer.

Data, information and knowledge management

The JRC will contribute to the implementation of the **2023-2024 Rolling Action Plan for Data, Information, and Knowledge Management** at the Commission (the Information Management Steering Board (IMSB) work programme). In the context of the DataStrategy@EC action plan, the JRC is leading the Data Advisory (DA) service action. In 2023, the DA service will continue with its two main functions of knowledge hub and support provider. Key deliverables are to define and implement a communication strategy that will increase awareness, and to provide specific guidance and support on implementing corporate governance and policies. The DA service action contributes to the digital strategy objective of enhancing openness and transparency within the EC. In addition, the JRC will continue to support operationalising the DataStrategy@EC action plan, e.g., in the area of Data Analytics and Business Intelligence (BI@EC strategic approach).

In 2022, the **JRC Data Strategy** was adopted and the coming years will be focused on implementing it. In 2023, a few selected use cases will be supported in their work on data by the Data Portfolio. Furthermore, a JRC Data Support Service will be established; an integrated process for publishing manuscripts and their underlying data will be defined; events and outreach activities to enhance knowledge of JRC data will be carried out; research in areas of information discovery will be conducted; and work will be initiated to make the data-infrastructure better fit-for-purpose.

Further guidance will be provided to data owners and data stewards around their tasks and responsibilities, and to the extent possible, collaboration between the various roles will be pursued. Also, a JRC research data repository will be deployed that will support staff to store data in a way that preserves the integrity of the content and of the accompanying metadata.

With regard to the policy on **record and archives management** (e-Domec), the JRC will pursue a sound record management by providing staff with the necessary knowledge to manage the life cycle of electronic files and records by several means including induction sessions to JRC newcomers, trainings, info sessions, simplified guidelines and presentations. Also, it will cooperate with the JRC owners of information systems integrated with HAN to implement the sensitive personal data flag to Ares documents that are automatically registered by such systems.

Within the scope of the **Digital preservation strategy** and relevant action plan, the JRC will continue the inventory of the preservation needs of Information Systems with the objective to set up appropriate retention period for those system whose content is qualified as record. In addition, it will support JRC services to identify the content stored within collaborative working platforms that need to be captured in Ares before the content is migrated to another platform.

The **EU Academy**, a modern, scalable e-learning platform, is available to all EU Institutions for hosting, managing and monitoring pedagogical content, with the main objective of reaching out policy makers, regions and the public at large in Europe. In 2023 the number

of DGs collaborating with the platform is expected to increase from the current 14 DGs to 25 DGs.

Data protection

The JRC strives to ensure rigorous implementation of the data protection rules. An awareness raising campaign by the JRC Data Protection Coordinator (DPC) will continue in 2023. In addition to reaching out to different units/teams with direct presentations on topics of particular interest to those units/teams, in 2023 all the JRC staff will be expected to have completed one of the available data protection trainings (with preference for the e-learning course). The JRC aims at finalising the review of all JRC records by end-March 2023, with all records (re-)published by end-May 2023.

E. Sound environmental management

The JRC intends to deliver an important part of the Commission's overall environmental efforts through the implementation of the *Greening the Commission* Communication, while continuing to carry out highly relevant scientific activities.

In line with the revision of the JRC local site development plans and the European Commission EMAS system[6], the JRC will further pursue its multi-annual programmes, seeking to reduce resources consumption on a continuous basis as reflected in the EMAS Global Annual Action Plan.

JRC will raise awareness of the Greening the Commission Communication and implement the following actions:

On **buildings and working space** and in line with the actions from specific objective 7.2, the JRC will:

- Continue to assess and possibly reduce energy use for scientific activities, in particular laboratory tests/experiments (e.g. decrease energy load in laboratories);

- Take energy efficiency measures, such as substituting fossil with renewable energy sources (e.g. increase the capacity of photovoltaic installations in Ispra[7]) or optimising operation of the technical installations (e.g. optimising the running conditions of ventilation, heating/cooling, air compressors in Geel);

- Continue to renovate and/or build efficient and sustainable buildings[8] (e.g. new entrance building in Petten, refurbishment of building 48 in Ispra) or, in the case of

---

[6] The EU Eco-Management and Audit Scheme (EMAS) is a premium management instrument developed by the Commission for companies and other organisations to evaluate, report, and improve their environmental performance. EMAS is formalised in Regulation (EC) No 1221/2009 ('EMAS III').

[7] Subject to 2023 budget allocation.

[8] Subject to 2023 budget allocation.

Seville, continue encouraging the landlord to carry out energy saving investments and actions.

On **staff and experts business travel** in addition to the corporate measures already decided at the level of the Commission in terms of budget reduction, the JRC will:

- Continue to assess the profile of its missions and perform an ex-post monitoring for staff travels (via MIPS[9]) to take stock of the progress made;

- Following the JRC pledge to reduce travel-related emissions in July 2022, continue to implement the principles from the SG/DG HR Guidance note on business travel and external experts' travel[10] (e.g. use of a mixed meeting mode, favouring greener travel alternatives) and raise awareness of this issue among staff;

- Incorporate the elements of the forthcoming Commission's updated Mission Guide, expected to be published in 2023.

On **greener mobility**, the JRC will continue to increase the number of services bicycles on site and maintain its fleet of hybrid/electric service cars.

To contribute to the **EU Green Deal**, the JRC will promote a circular economy by continuing to raise awareness on green public procurement and implementing further actions to preserve biodiversity (e.g. bird nests in Seville, tool for biodiversity mapping in Geel).

The JRC will pursue its efforts to disseminate best practices and environmental outcomes of scientific initiatives among its staff and the Commission EMAS Network, and continue to redesign *JRC Environment* intranet page.

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

The JRC has decided to continue to apply the efficiency gains identified during the pandemic, in particular the derogation to the correction of temporary postings of payments. This derogation saves many thousands of working hours spent while the risks involved are low. This has been welcomed by those involved in procurement and contract management as efficiency gains have been easily identified and achieved.

As noted above, the eProcurement programme continues to deliver. The 2023 programme foresees further progress on the President's digitalisation priority, with the following deliverables:

---

[9] No tool available at present to monitor travels of external experts (the Commission is working on a solution based of the AGM tool).

[10] Guidance note on business travel and external experts' travel in the framework of greening the Commission, Ares(2022)3580980

- Roll-out of IT solutions across the Commission for the specific and direct contract types, purchase orders and order forms;

- Phasing out of e-Tendering and migration to eForms;

- Support for end-to-end processes for inventory and logistics management.

eProcurement must deliver its contract management solution supporting all contracts of the Commission before the beginning of 2024 when SUMMA will be rolled out.

The JRC will continue to apply its cutting-edge experience and procurement expertise to its very large procurement portfolio.

The JRC home-grown eProcurement tool (PPMT) is now the corporate preparation tool across the Commission services allowing the identification of all procedures suitable for inclusion of 'green' criteria. The JRC has gone further than most in this respect by making a declaration that environmentally friendly criteria should be applied wherever possible.

The JRC continues to lead by example by means of its lead role in eProcurement as well as its own "License to Buy" initiative. In addition, it works alongside other Directorates General promoting further simplification efforts such as its current supporting role to DG COMM looking to minimise the workload related to very small financial transactions.

ANNEX: Performance tables

Part 1

Items in the table marked with the icon 📖 refer to JRC contributions to policy initiatives led by other DGs.

<table>
<tr><td colspan="3" style="background-color:#1f3d8c;color:white">General objective 7 – A modern, high performing and sustainable European Commission

Specific objective 7.1 – To support evidence-informed policymaking through creating and managing high-quality and fit-for-purpose scientific knowledge
Related to spending programme(s): Horizon Europe, Euratom</td></tr>
<tr><td colspan="3" style="background-color:#c0392b;color:white">Main outputs in 2023:</td></tr>
<tr><td colspan="3" style="background-color:#4a78c0;color:white">New policy initiatives</td></tr>
<tr><td>Output</td><td>Indicator</td><td>Target</td></tr>
<tr><td colspan="3">Related to GO1</td></tr>
<tr><td>📖 Report – REMIT – Data quality (Revision of EU's internal electricity market rules)</td><td>Technical report published</td><td>Q3</td></tr>
<tr><td>📖 Synthesis material on food waste (Revision of waste framework Directive)</td><td>Fiches published by the Knowledge Centre Bioeconomy</td><td>Q2</td></tr>
<tr><td>📖 Literature review (Animal welfare – revision of EU legislation)</td><td>Submitted to lead DG</td><td>Q1</td></tr>
<tr><td>📖 Economic modelling (Animal welfare – revision of EU legislation)</td><td>Submitted to lead DG</td><td>Q1</td></tr>
<tr><td>📖 Final report of the impact assessment (Legislative framework for sustainable food systems)</td><td>Technical report published</td><td>Q1</td></tr>
<tr><td>📖 Monitoring framework for the sustainable food systems (Legislative framework for sustainable food systems)</td><td>Submitted to lead DG</td><td>Q3</td></tr>
<tr><td>📖 Science for policy Report (Legislative framework for sustainable food systems)</td><td>JRC Science for Policy Report published</td><td>Q1</td></tr>
<tr><td>📖 Soil Biodiversity Report 2023 (Initiative on protecting, sustainably managing and restoring EU soils)</td><td>Soil Biodiversity Report 2023 published</td><td>Q1</td></tr>
<tr><td>📖 Soil Health Assessment 2023 (Initiative on protecting, sustainably managing and restoring EU soils)</td><td>Soil Health Assessment 2023 submitted to lead DG</td><td>Q4</td></tr>
<tr><td colspan="3">Related to GO2</td></tr>
<tr><td>📖 JRC Foresight Report on critical materials for strategic technologies (European critical raw materials act)</td><td>Published</td><td>Q1</td></tr>
</table>

Output	Indicator	Target
Launch of the new Raw Materials Information Management System (RMIS 3.0) (European critical raw materials act)	Launch event	Q1
Assessment of the wider benefits of coordinating energy efficiency upgrades in existing buildings with asbestos removal, including regions under high seismic risk, in the context of the Renovation Wave initiative (Screening and registration of asbestos in buildings)	Policy report published	Q2
Related to GO3		
Macroeconomic analysis of the impact assessment: (Digital Euro)	Information submitted to lead DG	Q2
Bank profitability and central bank digital currency (Digital Euro)	Technical report published	Q2
Analytical support to enable the renewed Stability and Growth Pact (Economic governance review)	Technical report/system submitted to lead DG	Q4
Support to Impact assessment (Business in Europe: framework for income taxation)	Submitted to lead DG	Q2
Related to GO4		
Report on Deforestation and Forest Degradation in the Amazon with updated status for year 2022 (New Agenda for Latin America and the Caribbean)	Technical report published	Q3
Gallileo Public Regulation Service Laboratory (EU space strategy for security and defence)	New test facility operational	Q1
Related to GO5		
LP-PKI operation intermediate report (Digitalisation of travel documents and facilitation of travel)	Technical report published	Q3
Technical report on VDS application (Digitalisation of travel documents and facilitation of travel)	Technical report published	Q3
JRC technical report on the ENF matching process (Revision of the combating child sexual abuse Directive)	Technical report published	Q2
Deployment of JRC Electric Network Frequency sensors in the EU delegations listed by Europol and the EEAS (Revision of the combating child sexual abuse Directive)	Deployment of a tool	Q1
Related to GO6		
Guidelines and toolkit for Member States on participatory processes and citizens engagement (Defence of democracy package)	Submitted to lead DG	Q2
Report: Hybrid Threats Resilience Baselines – Gaps, Needs and Ways to address them (Defence of democracy package)	Report published	Q1

Output	Indicator	Target
🖼 Mapping and gap analysis of cybersecurity standards (Defence of democracy package)	Mapping completed	Q2
Evaluations and fitness checks		
Evaluation of the Marine Strategy Framework Directive (MSFD). Reporting reviews and results of modelling	Submitted to lead DG	Q4
External communication actions		
Output	Indicator	Target
Media monitoring	Number of mentions of JRC in media	100
Science Hub	Number of visitors	200 000
Social Media		
Tweets	Engagement rate	0.33%
Facebook	Engagement rate	0.99%
LinkedIn	Engagement rate	2%
Instagram	Engagement	3.5%
	Views	1000
YouTube	Views	1000
Launch of the Annual Foresight Report	Number of mentions in the media monitoring	10
JRC monthly newsletter	Number of readers	70% of 30 000 subscribers
Commissioner's monthly newsletter	Number of readers	70% of 5 000 subscribers
Annual Research Conference (co-organised with DG ECFIN)	Number of participants	500
High-level event in Seville in 3rd quarter of 2023 to promote the JRC and its contribution to policymaking	Number of participants	500

Other important outputs		
Output	**Indicator**	**Target**
Report on Technology Monitoring and Assessment of hydrogen technologies and pathways	Technical report published	Q4
Work plan of priority products for ESPR (Ecodesign for Sustainable Products Regulation)	Published	Q4
Deployment and management of collaborative online platform (Engaged Education for Climate and GreenComp communities)	Deployment of a tool	Q1
Policy & Practice Forum (Engaged Education for Climate and GreenComp communities)	Launch event	Q2
Education for Climate Days 2023 (Engaged Education for Climate and GreenComp communities)	Launch event	Q4
JRC Foresight report on Europe's future pathways towards sustainability and related critical areas of intervention, supporting the annual strategic foresight report 2023	Report published	Q2
AI tools for disinformation detection and classification feed internal newsletters on disonfomration narratives, importance and suggested responses	Submitted to lead DG	Q1
Competence building through the Exploratory Research (ER) Programme	% of thematic priority areas addressed with Exploratory Research projects	60%
	Number of running ER projects	> 15
	JRC scientific staff actively involved in the exploratory Research community (ER&CAS) Programmes	> 3%
Projects of the Centre of Advanced Studies (CAS)	Number of implemented CAS projects	5
	Number of high-level experts engaged with CAS	>35

Output	Indicator	Target
Average participation in outreach events	Number of participants	> 50
Open Access to JRC research infrastructures (RI)	Number of RIs engaged in the programme	>20
	Percentage of access delivered in the programme	20%
Interim evaluation of the JRC in Horizon Europe and the Euratom Research and Training Programme	Report published	Q3
Implementation of the preparatory action 'Advancing evidence for policy at Union, regional and local level'	Number of events, training and pairing schemes	20+
Knowledge Centre Earth Observation: Report on Earth Observation for Environmental Compliance Assurance and Climate Change Adaptation.	Report published	Q4
The Africa Knowledge Platform: Example of Integrated scientific knowledge product in the fields of Clean Energy and Food Security and Nutrition	Published on the Africa Knowledge Platform, Policy Briefs	Q3
Preparation of draft Commission Implementing Decision setting out the detailed arrangements necessary for the establishment and functioning of the Innovation Centre for Industrial Transformation and Emissions	Draft submitted to the lead DG	Q1
Report on mapping the landscape of data intermediaries	Published	Q4
Report and how-to on the set-up of European Data Spaces	Published	Q2
Support the creation of regional innovation valleys through Partnership for Regional Innovation (PRI)	Updated PRI Playbook	Q3
Contribution of the 2023 Work programme of the Output Gaps Working Group	Technical report published	Q4
Earth Observation for Biodiversity	Case study on Earth Observation for Biodiversity published	Q4
The Africa Knowledge Platform	Presentation of the Africa Knowledge Platform (AKP) during the EU-Africa Summit 2022	Q1

General objective 7 – A modern, high performing and sustainable European Commission

Specific objective 7.2 – The JRC operates modern, sustainable and open research facilities

Related to spending programme(s): Horizon Europe, Euratom

Main outputs in 2023:

Other important outputs

Output	Indicator	Target
Geel: Refurbishment and adaptation of the conference centre following the New	Procurement and start of works	Q3

Output	Indicator	Target
European Bauhaus approach		
Geel: Refurbishment Non-Nuclear laboratories and offices B040 including insulation of the outer walls of B040	% completion	100% at the end of Q4
Geel: Safety and security improvements	% completion of a fence around Building 40	100% Q4
Geel: Renewal electricity and data cabling for site perimeter	% completion	100% Q2
Ispra: Construction of the tri-generation plant	% completion	60% Q4
Ispra: Installation of 150 kW photovoltaic panels on buildings, 17a, 59x, 69c.	% completion	100% Q4
Ispra: Building 48 office block complete renovation	% completion	75% Q4
Ispra: Building 36 training centre refurbishment office block complete renovation	% completion	75% Q4
Ispra: Renovation of the sewage system. Construction of the new connection lines from Building 36 towards main entrance area, buildings 01-66). Final working designs of the lines from waste water treatment plant towards Via G. Bretagna	% completion	100% Q4
Karlsruhe: New nuclear research facility 'Wing M'	Launch of tender procedures for the technical installations	Q1
Petten: Construction of a new entrance building	Complete the procurement phase of the project	Launch of tender procedure Q1 (pending approval of budget and notice to EP and Council) and completion of procurement Q3
Petten: New fence	Complete the procurement and award of contract	Q4
Seville: New Commission building	Basic Architectural Design Project	100%
Seville: construction of a Conference centre	% completion	100% Q1
Seville: New collaborative dynamic space including facilities for hybrid working (2nd floor)	% completion	100% Q1

General objective 7 – A modern, high performing and sustainable European Commission

Specific objective 7.3 – The Commission has appropriate capacity to manage risks related to intellectual property (IP) rights and be compliant with the rules and regulations

Related to spending programme(s): Horizon Europe, Euratom

Main outputs in 2023:

Other important outputs

Output	Indicator	Target
Reviewed set of IP clauses to be used in the contract templates of DG Budget	Delivery of a reviewed set of IP clauses to be used in the contract templates of DG BUDG	Q4
Raising awareness on IP management with Commission staff	Number of staff trained	Maintain 2022 results (920 staff members)
Policy on filing, registration and enforcement of EC brands	Policy adopted by the College	Q3

General objective 1:   The European Green Deal

Specific objective 1.1 – The JRC progressively decommissions its disused nuclear facilities and safely disposes of its radioactive waste

Related to spending programme(s): Nuclear Safety and Decommissioning

Main outputs in 2023:

Ispra site

Output	Indicator	Target
Supercompaction treatment of waste	Transfer of the first batch to supercompaction plant	Q1
Management of the bituminised drums waste stream	Signature of contract for off-site treatment	Q2
Management of the bituminised drums waste stream	Commission bituminised drums retrieval facility	Q3
Refurbishment of the waste characterisation facility	Commission the upgraded WCS facility	Q3
INE decommissioning licensing	Updating and re-submitting the decommissioning application following new nuclear law 101/2020	Q1
INE pre-decommissioning clear-out	Removing activated components from the INE decay pond	Q4
Cyclotron decommissioning	Submitting the decommissioning application	Q3

Karlsruhe site		
Decrease number of historical low level backlog waste at JRC Karlsruhe site	Removing 30% of drums	Q4
Petten site		
Preparation of specific contract for the graphite thermal column part 1 (batch 7)	Signature of the specific contract	Q1
Preparation of specific contract for some vessels (batch 1 and 12)	Signature of the specific contract	Q2
Geel site		
Transport of 1st batch (reference materials) of nuclear material at JRC Geel	Transfer of 1st batch executed	Q2

General objective 1: The European Green Deal
Specific objective 1.2 – Establish links and tools for nuclear decommissioning knowledge sharing and dissemination with stakeholders in the Member States
Related to spending programme(s): Horizon Europe, Euratom

Main outputs in 2023:		
Output	**Indicator**	**Target**
Knowledge sharing platform	Opening of the first version of the dissemination platform on Science Hub	Q1
Knowledge sharing platform	Opening of the second version of the dissemination platform on 'Knowledge for Policy' (4P)	Q4
Creation of knowledge products such as documents	7 knowledge products distributed on the platform (4 from JRC)	2 in Q2, 5 in Q4
Decommissioning knowledge management	Signature of a framework contract for decommissioning knowledge management	Q4

Part 2

A. Human resource management

Objective: The JRC 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 2023:

Output	Indicator	Target
1. Improving female representation in middle management		
Promotion of female representation in middle management	Number of internal female candidates applying for middle management positions	At least 1 female applicant per middle management vacancy
	Number of awareness-raising activities to improve female representation in middle management	At least 2 activities
2. Enhancing staff engagement		
Completion of follow-up on staff opinion survey 2021	Implement the recommendations of the working groups on the Survey	Q4
	- Meeting with each Directorate to present JRC Well-being offer and working arrangements to enhance work/life balance	At least one meeting per Directorate
	- Raise staff awareness on JRC Learning and Development offer, in particular relating to coaching, career development package and similar initiatives	At least two info sessions
	- Present the proposed Senior Management actions to the Senior Management Team	At least one presentation to the senior management meeting
JRC career development package	Further promote the actions identified in the Career Development Package	At least 2 info sessions for all staff
Local talent management programme	Continue the launch of the new programme with special focus on AD staff with management potential as well as the inclusive programme for AD7+ staff	Current programmes to close in Q1 – new programmes to be launched Q2
Development of staff in deputy heads of unit and team leaders positions	Number of participants in targeted events (trainings, workshops)	> 30 participants
	Satisfaction rate	> 75%
3. Attracting and retaining competent scientific staff		
Recruitment of scientists at post-doc and expert levels for exploratory research (CAS & ER)	Number of scientists applying to vacancy calls at postdoc and expert level	> 15

Doctoral students pursue their PhD at JRC in cooperation with academic institutions	Number of doctoral students co-supervised by the JRC through the CDP scheme (counting students at either JRC or high education institutions)	> 30
	Minimum number of PhD students under the CdP scheme residing at JRC	>25
Alumni network	Website active and up to date	Updated with information at least once per week (52/year)
	Activities between alumni and JRC (workshop, seminars, lectures), to exchange information	1 annual workshop

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 outputs in 2023:

Output	Indicator	Target
Effective controls: Legal and regular transactions	Risk at payment	Remains < 2 % of relevant expenditure
	Estimated risk at closure	Remains < 2 % of relevant expenditure
	Proportion of exceptions	Remains < 1 % of number of transactions
	Share of procurement procedures receiving a positive opinion from the Public Procurement Advisory Group (PPAG)	Remains ≥ 95 % screened by PPAG
Effective controls: safeguarded assets	The tri-annual inventory – scanning of movable assets on each JRC site	+/-90% of assets tracked during each physical inventory exercise.
Efficient controls	Timely Payments	Percentage of payments (in value) made within legal time limits remains ≥ 93%
Economical controls	Overall estimated cost of controls	Remains <4% of funds managed
	Cost of supervisory measures (ex-post controls)	Remains < 0.4 % of ex-post value controlled

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) [11] aimed at the prevention, detection and correction [12] of fraud.

Main outputs in 2023:

Output	Indicator	Target
Anti-fraud action plan	Adoption	Q4
Internal control strategy	Adoption	Q3

---

[11] 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'.

[12] 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: JRC 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 2023:

Output	Indicator	Target
Specific actions contributing to the implementation of the JRC ICT architecture and the corporate digital objectives.	Improved security, virtual desktop infrastructure, Welcome, single specific domain, consolidated IT	Q4
Migration to the Single Integrated Framework for Collaboration built around Microsoft 365 (M365)	Phase out CONNECTED and migrate to the Single Integrated Framework for Collaboration built around Microsoft 365 (M365)	Q4
Implementation of the corporate principles for data governance for JRC's key data assets	Percentage of implementation of the corporate principles for data governance for the JRC's key data assets	65%
Data owners and data stewards for JRC key data assets	Percentage of JRC key data assets for which data owners and data stewards have been communicated their tasks and responsibilities set in the EC data governance and policies.	100%
Data Architecture blueprint	High-level data architecture blueprint for the JRC developed	Q2
JRC research data repository	JRC research data repository established	Q4
JRC Data Support Service	Pilot service established	Q4
JRC staff made aware of the tools and trainings available in the EC for enhancing data management and data analysis, including EC Data platform supported tools (e.g. Power BI, QLIK, KNIME)	Awareness raising event organised among JRC staff (especially with data contact points of each JRC unit)	Q4
Implementation of sensitive personal data flag in systems integrated with HAN	Percentage of the JRC Information systems integrated with HAN	100% of JRC integrated systems implement the SPD flag
Inventory of the preservation needs of JRC Information Systems	Number of JRC Information systems inventoried	At least 100 information systems inventoried
Awareness raising activities on data protection compliance among JRC staff	Percentage of staff reached by the awareness raising activities	100%
Review of all JRC data protection records	Review completed	Q1
	Records (re-)published	Q2
EU Academy – Develop and deliver a platform release for hosting of a wide variety of e-learning content	Number of JRC courses on platform	55

PSIS (Standardisation) – Organise a workshop bringing scientists, policy makers, industry and experts from different disciplines together	Workshop organisation	At least 1
	Minimum number of participants	> 50

E. Sound environmental management

Objective: The JRC takes account of its environmental impact in its actions and actively promotes measures to reduce the related day-to-day impact of the administration and its work, with the support of its respective EMAS Local Site Coordinators/EMAS Correspondents.

Main outputs in 2023

I. Using more efficiently resources (energy, water, paper)

Output	Indicator	Target
Efficient maintenance of existing installations and increase in the installed capacity of photovoltaic panels	Electrical capacity of photovoltaic panels	+84% in 2023 compared to 2019[13,14]
Analysis of water consumption of buildings	At least yearly follow up	Q4
Staff awareness actions to reduce the use of resources (energy/water/paper) in the framework of EMAS corporate campaigns	Information posted on Connected	Q4

II. Reducing CO_2, equivalent CO_2 and other atmospheric emissions

Optimise and gradually reduce CO_2 emissions from staff business travel	CO_2 (t) emissions from staff business travel15	Reduce CO_2 emissions linked to staff travel by 40% compared to 2019
Increased number of service bikes	Number of new bikes	+6,5% in compared to 2021[16]
Staff awareness actions about sustainable commuting during the EU Mobility week and VéloMai corporate events	Information posted on Connected	Q2

III. Reducing and managing waste

Staff awareness actions about waste reduction and sorting, in line with the corporate EMAS waste reduction campaign	Information posted on Connected	Q4

IV. Promoting Green Public Procurement (GPP)

---

[13] Subject to 2023 budget allocation.

[14] Baseline 2019: 1130 kW (Ispra: 740 kW – Petten: 390 kW – Geel/Karlsruhe/Seville: 0)

[15] Data provided by PMO in MIPS

[16] Baseline 2021: 288 bikes (Geel: 90 – Ispra: 140 – Petten: 40 – Karlsruhe: 18 – Seville: 0)

Maintain the existing flagging system through the Public Procurement Management Tool (PPMT) to automatically assess which procurement is to be analysed for GPP criteria	Implementation of GPP criteria or environmental specifications, where applicable	100%
V. Supporting biodiversity		
Action to preserve and/or improve biodiversity (e.g. insect hotels, planting trees)	Number of actions	+14% of 2019 results[17]

---

[17] Baseline 2019: 14 actions on biodiversity (Geel: 1 - Ispra: 10 – Karlsruhe: 0 – Petten: 2 – Seville: 1)