



European
Commission

Management plan 2022

DG DEFENCE INDUSTRY AND SPACE

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INTRODUCTION

DG Defence industry and space: Making the EU more secure, sustainable and resilient

The Directorate-General for Defence Industry and Space (DG DEFIS) develops and carries out the Commission's policies on defence industry and space. The global geopolitical context is changing rapidly, calling for more concrete action at the EU level in the field of security and defence and a reinforcement of technological sovereignty. The actions of DG DEFIS reflect this development in a pragmatic manner.

This **annual DG DEFIS management plan** outlines the key deliverables for 2022, in line with the DG DEFIS strategic plan and intervention logic (Annex 1) for the period 2020-2024. The outputs contribute to the following four out of the six main political priorities of the von der Leyen Commission: 'A European Green Deal', 'A Europe fit for the digital age', 'A stronger Europe in the world' and 'Promoting our European way of life'.


The main priorities of DG DEFIS for 2022 will be the following:

- deliver on the **innovative and sustainable space policy** objective in the 2022 Commission Work Programme, by:
 - launching a new initiative for an **EU space-based global secure communication system** for secure governmental communications and high-speed broadband availability;
 - preparing a Communication on the **EU strategy for space traffic management**;
- continue the implementation of the **EU Space Programme** (Galileo, EGNOS, Copernicus, Space Surveillance and Tracking (SST)/ Space Situational Awareness (SSA) and GOVSATCOM), **Horizon Europe for the space part, the Space Entrepreneurship Initiative CASSINI**, notably via the respective 2022 work programmes;
- continue the implementation of the **European Defence Fund (EDF)** and project management for the Preparatory Action on Defence Research (PADR) and European Defence Industrial and Development Programme (EDIDP).
- conclude the **Inter-Institutional Framework Contract for EU Launch Services** with Arianespace;
- contribute to the **defence package** foreseen in the Commission 2022 Work programme, which includes a **roadmap on critical technologies for security and defence** and further contributions to the finalisation of the Strategic Compass;

- contribute to the development of a European Cyber Defence Policy by exploring the possibilities for setting out legislation on common standards under **a new European Cyber Resilience Act**;
- continue coordination and mainstreaming of the Commission services' contributions to **countering hybrid threats**;
- contribute to the elaboration and implementation of the **European Chips Act**, ensuring that the specific needs of the space and defence sectors are taken into account;
- continue implementing relevant actions under the **Action Plan on Synergies between civil, defence and space industries**, and notably the set-up of the **Observatory for Critical technologies** and development of initiatives supporting innovation in the defence sector;
- deliver on the EU's updated industrial strategy by launching **a European Alliance on Space Launchers** and an **Alliance on Zero Emission Aviation**.

The main challenges for 2022 are:

- the **Implementation of the European Defence Fund**, implying a **massive scaling-up** of the number of projects to be handled, simultaneously to the discussion of the subsequent annual work programme (first semester) on top of the management of the ongoing precursor programmes projects, at near-constant staff level;
- to deliver on the many 2022 priorities in a work environment likely still influenced by the **COVID-19 pandemic** and in a **rapidly evolving geo-political environment**, directly impacting on the DG's activities and workload;
- to attract and retain **highly skilled staff** with experience in the field of space and defence, including through the specialised EPSO competition planned for 2022.

In this document, the icon  refers to initiatives featured in the Commission Work Programme.

PART 1. Delivering on the Commission's priorities: main outputs for 2022

The Commissions' ambition for **greener and sustainable, more digital and connected, resilient societies** are at the core of the DG DEFIS plans. Likewise, **reinforcing strategic autonomy** and **security in Europe**, whilst fostering a spirit of **international cooperation, and maintaining core democratic values** underpin DG DEFIS mission. In this section, the DG DEFIS contributions to four of the von der Leyen Commission headline ambitions are set out in more detail.

A. A European Green Deal

Specific objective 1.1: Reliable data and services of the EU Space Programme are cornerstones for the monitoring of, and transition to climate-neutrality and ecological sustainability

DG DEFIS proactively targets legislative initiatives under the Green Deal, as presented in the Commission's 2022 Work Programme, to ensure integrating the contribution of the EU Space Programme to EU cross-sectoral strategies.

Copernicus, the EU's Earth observation system, contributes directly to the Commissions' ambitions on fighting climate change with its unique capability to **monitor greenhouse gas emissions**. The Copernicus climate change service data is used by international bodies to track trends towards achieving the **United Nations Sustainable Development Goals (SDG)** and to feed into various reports, e.g. the EUROSTAT SDG reporting.

In 2022, **the Copernicus European State of the Climate Report** and **Ocean State Report** will be issued, peer-reviewed by established international experts¹.

The EU Space Programme provides reliable services and reports **supporting the formulation, implementation and monitoring of policies to protect biodiversity (EU Biodiversity Strategy for 2030)**. The Copernicus Climate Change Service develops tailored information products on key indicators such as temperature, sea ice and CO₂ levels. The Copernicus Atmosphere Monitoring Service uses near-real-time observations of the location and intensity of active wildfires to estimate the emissions of pollutants that may impact biodiversity in the affected areas. These services **will also continue reporting on the effects of pollution on the environment and of the COVID-19 pandemic**.

The **Copernicus Land Monitoring portfolio** addresses indirectly biodiversity with information describing and monitoring the environmental conditions and landscapes related to biotopes. The land use monitoring information supports the reporting to be done in the

⁽¹⁾ Funded under the Foreign Partnership Instrument

context of the Land Use, Land Use Change and Forestry (LULUCF) Regulation. At global level, most of the land biophysical variables are also considered as essential climate variables, including the **water extent which covers SDG 6.6.1**. The coming Forest-REDD element will strongly contribute to the climate mitigation strategy.

Copernicus services **support systemic changes and public actions in favour of zero pollution for air and coastal areas**, or for conservation of nature for example with the development of a Copernicus MSFD² catalogue (dedicated monitoring of the Good Environmental Status). The Copernicus marine service portfolio will be further reinforced in 2022 with the integration of the Copernicus satellite Sentinel-6 Michael Freilich data.

The EU satellite navigation services provided by Galileo and EGNOS lead to a range of innovative applications that enable smart mobility and multi-mode transport digitalisation with **optimised travel routes**, in turn allowing for a reduction of CO₂ emissions.

A project to **improve the EU Space Programme's environmental footprint** and **help the European space industry contribute to the EU Green Deal objectives** will be continued in 2022. While the first phase of the project defines a shared ambition, the second phase will develop the life cycle assessment for the space value chain.

DG DEFIS will continue contributing to a maturing project, '**Destination Earth**³', expected to become a powerful tool to guide the green transition. In 2022, dedicated contribution agreements will be set up with the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) and the European Centre for Medium-Range Weather Forecasts (ECMWF). This is a project 'in simulation' run by DG CNECT, that will provide access to space Earth observation data and information products by Copernicus services. 'Destination Earth' aims to develop a dynamic, interactive, computing and data intensive "Digital Twin of the Earth": a digital multi-dimensional replica of the Earth system.

Based on **sectoral data exploitation**, environment actions such as the "**Shared Space- and Non-Space Data for Agriculture**" will be supported. The Farm Sustainability Tool (FaST) is a digital service platform developed to support farm economic and environmental sustainability with the help of space data (Galileo and Copernicus) and other public and private datasets. It provides parcel and crop data to farmers, advice on legal limits for fertilisation and more general nutrient management advice, as well as messaging functionalities, among others.

Other important initiatives

Beyond the EU Space Programme, other important initiatives within the portfolio of DG DEFIS support the European Green deal and **the transition to climate-neutrality**. For example, DG DEFIS is responsible for the civil aeronautics industry, which is particularly

⁽²⁾ Marine Strategy Framework Directive

⁽³⁾ part of the Digital Europe Programme

struck by the COVID-19 pandemic and challenged by the transition to carbon neutrality. Following the EU's updated industrial strategy, DG DEFIS will launch an **Alliance on Zero Emission Aviation** in 2022 to prepare the market take-up of innovative zero emission aircraft configurations powered by hydrogen and electricity, encouraging the aeronautics industry on a path towards the EU's climate neutrality objective and sustainable growth.

In the area of defence, DG DEFIS is actively pursuing the EU Green Deal objectives and will propose in 2022 funding topics under the European Defence Fund (EDF) for **defence-oriented solutions contributing to the reduction of the carbon footprint**. One of the funding topics will for instance focus on the advanced deployable water treatment systems. Under broader EDF categories, such as the future main battle tank, studies will address and possibly design for upgrades and development of future technologies, including enabling and green technologies.

Communication

2022 being declared the European Year of Youth, particular attention will be brought on communicating with younger people. DG DEFIS will continue to set-up partnerships with schools to organise info sessions raising awareness on the EU Space Programme and the role of EU Space data in their daily lives, and notably to mitigate the impact of climate change. DG DEFIS will also continue to foster the emergence of space-related courses in environment-related Masters curricula in Europe, through the Network of Copernicus Academy.

Targeting a wider audience, DG DEFIS will promote opportunities for developing new applications based on space data/services in new 'non-space' sectors. For instance, a partnership with DG Agriculture will be set up to promote the use of EU space data and services for farmers. The latter will be materialised with a joint AGRI-SANTE-DEFIS stand at the International Agricultural Show in Paris (FR), where DEFIS will promote applications developed by former beneficiaries of DEFIS-led incubators and accelerators programmes, notably through info sessions. Social media presence on (twitter, instagram and facebook) will be continued to complement all planned communication activities⁴ to regularly inform and engage with stakeholders and to increase awareness.

Communication activities will accompany the launch of the Alliance on Zero Emission Aviation and the opportunities for a greener aeronautics industry targeting the general public, notably through a social media campaign on DG DEFIS' and its partners' accounts. Moreover, the 2022 EDF calls will be promoted to reach and attract applicants from wide audiences, in particular SMEs and mid-caps across Europe, and specifically underline the link to the Green Deal priority.

(⁴) This applies to all communication activities that are presented in other sections in this document

DG DEFIS will organise stands and side events to ensure the worldwide promotion of EU space-based opportunities at key environment-related events, such as the events organised in the context of the Conference of the Parties to the UNFCCC⁵.

DG DEFIS will continue to set up partnerships with cities to rotate the exhibition [Space for Our Planet](#), kicked off in 2021, with testimonies of users benefiting from EU Space data and services to develop local initiatives which are addressing the UN Sustainable Development Goals.

The fight against disinformation which is a widespread and growing phenomenon potentially undermining the image of the EU and the efficiency of its efforts, is at the heart of DG DEFIS communication activities⁶. This is an intrinsic part of the DNA of the Copernicus component that since 2018 has developed a permanent control activity of publications and articles quoting space data where authors are systematically contacted each time a disinformation action has been identified, asking them to correct it.

General objective: A European Green Deal

Specific objective: 1.1 Reliable data and services of the EU Space Programme are cornerstones for the monitoring of, and transition to climate-neutrality and ecological sustainability

Related to spending programme(s): EU Space Programme

Main outputs in 2022:

External communication actions

Output	Indicator	Target
Promotion of EU space based opportunities for agriculture: "International Agriculture Show, Paris (FR)"	<ul style="list-style-type: none"> - Number of events organised - Number of participants 	<ul style="list-style-type: none"> - Stands and training sessions at 1 agriculture related event in the EU - 15.000 participants
Touring of the "Copernicus Earth Art" Exhibition	<ul style="list-style-type: none"> - Number of locations - Number of participants 	<ul style="list-style-type: none"> - 6 locations in different Member States - 10.000 participants
Touring of the "Space for Our Planet" Exhibition	<ul style="list-style-type: none"> - Number of locations - Number of participants 	<ul style="list-style-type: none"> - 10 different locations in different countries - 50.000 participants
Organisation of a high-level conference on the future of Copernicus, in Toulouse, (FR) 16-17 Feb. 2022)	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 1.500 participants (500 onsite + 1.000 online)

⁽⁵⁾ United Nations Framework Convention on Climate Change

⁽⁶⁾ This applies to all communication activities that are presented in other sections in this document.

Output	Indicator	Target
Promotion of EU space based opportunities at the “EU Green Week” through a stand and a side session	- Number of participants	- 2.000 participants
Promotion of EU space based opportunities at the UN COP27 through a side session	- Number of participants	- 100 participants
Organisation of the launch event of the alliance on zero emission aviation	- Number of participants	- 500 participants
Animation of a webpage dedicated to DEFIS policies contribution to the green deal objective	- Number of visits	- 5.000 visits
Other important outputs		
Output	Indicator	Target
ESTAT SDG annual Report	EUROSTAT SDG indicators based on Copernicus for SDG 15, 14	Q3 2022
Copernicus European State of the Climate Report	Adoption by the Commission	Q2 2022
Annual Ocean State Report	Publication in the Journal of operational oceanography	Q4 2022
Launch an alliance on Zero Emission Aviation	Launch an alliance on Zero Emission Aviation	Q1 2022

B. A Europe fit for the digital age

Specific objective 2.1: Modern and well-functioning EU space-enabled services to support the Union’s priorities

New flagship - EU space-based global secure connectivity system

In 2022, DG DEFIS (jointly with CNECT) will propose a new initiative on an **EU space-based global secure communication system** for secure governmental communication needs and the provision of high-speed broadband. The new flagship is based on the GOVSATCOM component (see section D), and is complementing the Union’s satellite navigation (Galileo/EGNOS) and Earth observation programmes (Copernicus) components of the EU Space Programme.

A secure and resilient global connectivity capability is Europe’s own reply to geopolitical and cybersecurity threats and the compelling digitisation of the economy. It aims to provide reliable governmental communication services to support protection of critical infrastructures, external actions and crisis management and ubiquitous high-speed broadband capacity. Using quantum and 5G technologies and a fully European supply chain, the initiative will offer business opportunities to the whole industrial ecosystem in Europe,

large enterprises, SMEs and start-ups. Preparatory activities have been carried out in 2021, leading to the consolidation of the mission and to the definition of a preliminary design architecture. The technical elements will be further complemented with inputs from the new-space industrial ecosystem. In the first half of 2022, the Commission will make a legislative proposal for this new flagship.

EU Space Programme

DG DEFIS will continue to manage the implementation of the Space Regulation (EU) 2021/696 establishing the Union Space Programme and the European Union Agency for the Space Programme (EUSPA). The new governance of the EU Space Programme will continue to be implemented and managed in 2022 on the basis of the **Financial Framework Partnership Agreement (FFPA)** concluded in June 2021 between the Commission, the EUSPA and the ESA, and the associated contribution agreements delegating tasks to EUSPA, ESA and other entrusted entities.

The EU Space Programme is the cornerstone of the EU's Space Policy. Especially in the areas of satellite navigation and Earth observation, the programme components Galileo, EGNOS and Copernicus have become true success stories, as their services are recognised for their high quality worldwide. They ensure that Europe is independent from other service providers in the world, in key technologies that are essential for the EU economy and society. It is therefore of crucial importance to complete, maintain and constantly modernise the infrastructure, and to further develop the services provided in line with user expectations and political needs. For this purpose, Europe needs to capitalise on the expertise and industrial excellence available in the EU, by creating the conditions for a prospering and competitive space sector.

An important milestone will be the achievement of the **full operational capability of the Galileo Open Service** by the end of 2022.

The speedy **implementation of the Galileo second Generation** is fundamental as well, to keep Galileo at the forefront of the GNSS systems in the global context. This work will continue in 2022.

New Galileo services will include **authentication and an increase of accuracy to the level of two decimetres**: the Galileo Open Service Navigation Message Authentication (OSNMA) will continue its public observation phase offering an initial signal capability in 2022. Also for the Galileo High Accuracy Service (HAS) work towards an initial service declaration will continue in 2022, also based on an initial signal capability.

For the Galileo **Public Regulated Service (PRS)**, the infrastructure will continue to be developed, deployed and qualified during 2022, in line with the PRS roadmap, with the objective to reach Initial Operational Capability by end of 2023.

The Commission will continue to work closely with Member States in relevant radio frequency regulatory forums to find appropriate mechanisms to ensure that any negative impacts are minimised or mitigated.

In 2022, DG DEFIS (with the technical support of ESA) is expected to start the preparation of the **future Copernicus satellite constellation**, and to confirm the development of new Earth observation capacities (Copernicus expansion missions), notably the Copernicus CO₂ monitoring mission. The transformation of the Copernicus ground segment, including maximisation of cloud resources, is expected to be completed by end 2022.

DG DEFIS and ESA will assess the use of quantum technologies and the development of new sensors for Earth observation, and in particular the use of quantum space gravimetry. **A quantum space gravimetry pathfinder mission will be defined** in close collaboration with ESA and Member States to test and demonstrate the technology in orbit before 2030.

DG DEFIS will foster the development of a sovereign and non-dependent EU space ecosystem for its space domain, including for the EU Space Programme. In particular, DG DEFIS in collaboration with DG CNECT will ensure the development of a sustainable EU supply chain for space quantum critical components so that the EuroQCI space segment, and later on the secure connectivity system, can **benefit from EU-made technology**. These activities are in the R&D stage and are funded under the Horizon Europe programme, contributing to the technology maturation of both the quantum space gravimetry and the critical components of the EuroQCI space segment.

Implementation of the 2022 work programmes of the EU Space Programme

The 2022 **work programmes of the EU Space Programme** are to be adopted in the first quarter of 2022 as a Commission Implementing Decision. The work programmes will set out the detailed 2022 objectives, activities and budget spending plans per component of the EU Space Programme (Copernicus, Galileo/EGNOS, GOVSATCOM, SSA, horizontal), and their implementation will be closely monitored.

DG DEFIS will launch four space policy studies in 2022. The first study on **Space Value Chains Resilience** will, among other things, establish a list of critical raw materials for the European space sector and will evaluate industrial policies of relevant third countries putting at risk EU strategic autonomy in space. The second study on **Improving access to testing facilities for EU new space transportation solutions, including micro-launchers**, will map existing public and private testing facilities across the EU, with a view to optimise their use and open them to new entrants. The third study aims at **developing a methodology for assessing the impact of EU space industry on the EU economy**⁷ and will address the needs of explaining the economic, social and environmental benefits of the EU Space Programme. The fourth study will **assess extra-contractual liability risks of the EU for space activities carried out under the EU Space Programme** to

(⁷) Study funded under Horizon Europe, launched and managed by DG DEFIS.

protect the EU financial interests in the implementation of the EU Space Programme for the period 2021-2027.

Patent protection

In the course of work on the Galileo Programme, several new technical inventions were developed. The inventions have a potential of improving speed, accuracy and robustness of Galileo services. To obtain an enforceable intellectual property right for the Union, DG DEFIS seeks protection of the inventions by filing applications for patent protection.

Data management

To streamline the Copernicus data and information access and to capitalise on the European cloud providers (including European new space actors) that can serve better the Copernicus users, the Copernicus Data and Information Access Services (DIAS) will be upgraded in 2022. This is part of an Integrated Data Management strategy, seeking to strengthen Copernicus⁸ as a 'system of systems' and to empower users with better access and **big data exploitation** capacities.

Communication

The EU Space Programme plays a crucial role in bringing forth Europe's digital transformation and **building confidence** in it. A dedicated campaign will be organised by DG DEFIS to accompany the launch of the new EU space-based global secure communication system that will offer EU-wide broadband connectivity where it currently does not exist or is insufficient, and secure and independent communications capacity to Member States. Specific attention will be paid to promote the launch of this initiative to the population that can directly benefit from this new initiative. Close cooperation with the Commission's Representation offices in those Member States will be set up to ensure the promotion in national and local media. The Networks of Copernicus Relays and Copernicus Academy will also play an important role to spread the word and disseminate promotional materials at regional and local levels, through their respective channels of communication (e.g. social media, newsletters and websites).

As a follow-up to the signature of the FFPA for the EU Space Programme and the respective contribution arrangements, closer cooperation with ESA, EUSPA and Copernicus entrusted entities will be implemented to foster synergies. Working groups will be set up, aiming at avoiding unnecessary overlaps and reduce costs for communication and outreach-related activities.

⁽⁸⁾ Copernicus is fully digitalised with Earth observation data in data cubes, some Analysis-Ready Data (ARD) and Earth system models running on High Performance Computing (HPC) from the Copernicus marine, atmosphere, climate change and emergency services.


General objective: A Europe fit for the digital age

Specific objective: 2.1: Modern and well-functioning EU space-enabled services to support the Union's priorities

Related to spending programme(s): EU Space Programme,

Main outputs in 2022:

New policy initiatives

Output	Indicator	Target
 <p>Proposal for a legal basis for the establishment of an EU space-based global secure communication system adopted by the Commission</p>	Adoption by the Commission	Q1 2022

External communication actions

Output	Indicator	Target
Organisation of communication expert group to coordinate activities implemented by partners of the EU Space Programme	<ul style="list-style-type: none"> – Number of meetings – Number of factsheets – Number of detailed reports 	<ul style="list-style-type: none"> – 5 meetings – 4 quarterly factsheets – 1 annual analytical report
Organisation of a launch event for the secure connectivity initiative	– Number of participants	– 700 participants

Other important outputs

Output	Indicator	Target
Commission implementing decision on adoption of 2022 work programmes of the Union Space Programme	Adoption by the Commission	Q1 2022
The programme committee as foreseen in the EU space Regulation shall meet in 6 different configurations (Horizontal, Copernicus, Galileo and EGNOS, GOVSATCOM, SSA, and Security) and will assist the Commission in the implementation of the Union Space Programme	Number of meetings	3-5 per configuration in 2022
Launching study on space value chains resilience	Launching the study	Q1 2022
Launching study on improving access to testing facilities for EU new space transportation solutions, including micro-launchers	Launching the study	Q1 2022

Output	Indicator	Target
Launching study aiming to develop a methodology for assessing the impact of EU space industry on the EU economy	Launching the study	Q1 2022
Launching study to assess extra-contractual liability risks of the EU for space activities carried out under the Union Space Programme	Launching the study	Q1 2022

Specific objective 2.2: EU Space Programme maximises socio-economic benefits

Framework conditions for market uptake

In 2022, DG DEFIS will continue **promoting the use of space data, information and services in EU policies and legislation**, in particular in the initiatives proposed in the Commission work programme 2022.

In 2021, the **European Court of Auditor's Special Report 07/2021** assessed the effectiveness of the measures taken by the Commission to promote the uptake of services derived from the EU space components. The report contains four recommendations that were accepted by the Commission and that will be followed up by 2023 and 2024. In 2022, DG DEFIS will continue preparatory activities to address these recommendations.

DG DEFIS is committed to support the Commissions' ambitions on equality. DG DEFIS is **mainstreaming equality across defence, aeronautics and space policies**. Building on a pan-European study commissioned in 2021 to map the status quo, the results of this exercise will allow to collect baseline data in 2022 to feed EU policy and to actively promote the European values (equality, diversity and inclusion) in the defence, aeronautics and space sectors.

Research and innovation – Horizon 2020 and Horizon Europe⁹

To foster the development of innovative and competitive European upstream and downstream space sectors, the first grants will be awarded in 2022 following the calls for proposals published in October 2021 under the Horizon Europe programme. The new HaDEA executive agency is entrusted with the implementation of the majority of the calls for proposals, building on the long experience of the REA agency in implementing FP7 and Horizon 2020. In addition, several important actions will be implemented in indirect management by ESA and EUSPA under contribution agreements.

⁽⁹⁾ To be noted, research and innovation activities go beyond the reach of specific objective 2.2 that is seeking to maximise socio-economic benefits under the EU Space Programme and form an integral part of the EU space programme and the EDF managed by DG DEFIS.

Horizon Europe will target **”Open strategic autonomy in developing, deploying and using global space-based infrastructures, services applications and data”**, including by reinforcing the EU’s independent capacity to access space, securing the autonomy of supply for critical technologies and equipment, and fostering the EU’s space sector competitiveness.

The **In-Orbit Demonstration and Validation (IOD/IOV) initiative** will provide regular flight opportunities to validate innovative space technologies. In doing so, it will support space research and accelerate the deployment of innovative technologies in space by testing them under real conditions. The first European quantum communication satellite ‘Eagle 1’, will benefit from the IOV/IOD initiative to test Quantum key distribution from space. While one call for expression of interest for new IOD/IOV experiments is foreseen to be launched in end-2021, the second one will follow in 2022.

Supporting European space-based businesses & New Space

To create a dynamic European New Space industry, the Commission’s **Space Entrepreneurship Initiative CASSINI** will include actions to improve networks, business skills and facilitate access to finance for growing companies in 2021-2027 grouped as follows:

- CASSINI Business Accelerator, CASSINI Hackathons & Mentoring, and CASSINI Prizes (Horizon Europe).
- CASSINI Matchmaking between start-ups, industry and venture capital (Space Programme budget).
- CASSINI Seed and Growth Funding Facility – equity investments to early and growth stage start-up and scale-up companies (Space Programme and InvestEU budgets).

The planned actions are expected to boost both entrepreneurship and New Space companies that are in the growth stages. For 2022, DG DEFIS and ESA will update the procurement principles for Copernicus contributing missions, so as to ensure a level playing field also for SMEs who wish to take part in calls for tender for contracts to supply satellite data for the Copernicus contributing missions.

Global systems with global reach

Promoting the international outreach and uptake of the EU Space Programme and strengthening Europe’s role as **a strong global space actor** implies a range of international engagements with third countries, international organisations, and concluding administrative arrangements and international agreements with key partners.

In the field of Earth observation, international cooperation enhances the Union’s capacity to monitor implementation of global agreements such as the Paris Climate Agreement, the more recent Glasgow Climate Pact agreed in the COP26 summit, and the UN Sustainable Development Goals, which has an intrinsic value to the EU in terms of reputation enhancement and contributes to the Union’s own priorities like the Green Deal. The growing use of Copernicus data by the international scientific community (e.g. organisations such as the World Meteorological Organisation (WMO), the United Nations

Framework Convention on Climate Change (UNFCCC), United Nations Environment Programme (UNEP), etc.) **reinforces the EU's voice in international climate change talks and negotiations.** In addition to implementing the existing Copernicus cooperation arrangements, new arrangements based on reciprocity and the EU's strategic interests, could be concluded during 2022¹⁰.

To **support the uptake** of Galileo and EGNOS services worldwide and/or to promote **technical cooperation with key international players**, bilateral agreements and administrative arrangements¹¹ have been signed **in the field of satellite navigation.** Such partnerships offer the opportunity for the EU to influence the introduction of compatible and/or interoperable services, thereby promoting solutions and standards developed by EU industry for Galileo and EGNOS. Negotiations with the United States (U.S.) on the extension of the existing Galileo-GPS¹² Cooperation Agreement are to be finalised. Discussions are ongoing to expand cooperation with strategic international partners, including for the Galileo PRS, where alliances play a crucial and strategic role. Negotiations should be finalised with Norway, advanced with the U.S. and prepared with Canada and possibly other priority countries. DG DEFIS will continue negotiating agreements for the extension of EGNOS services to the Eastern and Southern neighbourhoods and explore the expansion of EGNOS system coverage to other regions. The procedure to allow the participation of Norway and Iceland in the EU Space Programme will be finalised.

DG DEFIS will continue to promote the EU Space Programme's operational needs and strategic interests through different **international and multilateral fora**, such as the International Telecommunications Union (for frequencies), International Committee on GNSS, COSPAS-SARSAT, the Working Groups under the EU-U.S. GNSS Cooperation Agreement, the Group on Earth Observations (GEO), and the Committee on Earth Observation satellites (CEOS), among others.

DG DEFIS will resume its **space dialogues with key international partners** (e.g. United States, Japan) and launch new ones with new partners, such as Australia and Canada, as well as with the African Union (if and when the COVID-19 situation allows).

DG DEFIS will continue its cooperation with DG INTPA to support the second phase of the "GMES¹³ and Africa" initiative, with the effective contribution of the Copernicus Land and Marine services and selected partners in developing countries to maximise the use of Copernicus data. Similarly, cooperation with DG INTPA will continue on launching and managing the third support activity of the Joint Programming Office (JPO) in Africa;

(¹⁰) E.g. Canada, Japan, Argentina, Indonesia, Vietnam, Bangladesh, Panama, Thailand, Holy See, the Philippines, United Nations Environment Programme (UNEP), Food and Agriculture Organisation (FAO), and the World Meteorological Organisation (WMO).

(¹¹) Administrative arrangements in preparation with some Latin American countries.

(¹²) Global Positioning System (GPS) is the global navigation satellite system (GNSS) which is owned and operated by the United States.

(¹³) Global Monitoring of Environment and Security – precursor to the Copernicus programme

preparing the critical design review phase for a Satellite-based Augmentation System (SBAS) extension in the ASECNA region¹⁴ in Africa; and preparing the next phase for an EGNOS V3 coverage of Africa.

Other important initiatives

Taking on a broader perspective, DG DEFIS is actively seeking synergies between space and defence industries, supporting the EU's drive towards the digital transition, but also contributing to build resilience, safety and security¹⁵. In addition, the European Defence Fund (EDF), apart from contributing to the general objective of 'A Stronger Europe in the World', addresses the objective of making 'Europe fit for the digital age' with notable examples on digital transformation, information superiority and cyber.

Stepping up cyber defence activities

In line with the increased ambition on cyber activities announced in the 2021 State of the Union Address by President von der Leyen, priorities will focus on e. improved cyber defence capabilities, improved operational cyber capacity and resilience. Cyber is a crucial part of defence and through the EDF funding and Member States increased commitments we can make a difference. Topics addressing cyber defence are foreseen under the EDF work programme 2022.

Working closely with DG CNECT and EEAS and other relevant stakeholders, DEFIS will contribute to the development of a European Cyber Defence Policy; including by exploring the possibilities for setting out legislation on common standards under **a new European Cyber Resilience Act**.

Reinforcing Industrial Strategic Autonomy

DG DEFIS will continue leading the implementation of several actions of the **Action Plan on Synergies for Civil, Defence and Space Industries**. As those actions promote cross-fertilisation between domains, they contribute to several priorities, including 'A Europe fit in the digital age' and 'A stronger Europe in the World'. An important long-term action is the Observatory for Critical Technologies (Action 4), under development by Commissions' Joint Research Centre (DG JRC) and DG DEFIS. The Observatory will systematically monitor risks associated with strategic dependencies for technologies in the domain of space, defence and related civil sectors.

Other actions with a particular focus on the digital domain where DG DEFIS is in the (co-) lead and that are set to be rolled-out in 2022 are:

⁽¹⁴⁾ Agence pour la sécurité de la navigation aérienne en Afrique et à Madagascar (ASECNA)

⁽¹⁵⁾ These actions go beyond the DEFIS specific objectives 2.1 and 2.2, are complementary to the specific objectives 4.1 and 5.1 in this Management Plan.

- Initiatives to raise awareness amongst start-ups, SMEs and RTOs active in the IT and cyber sector in relation to funding opportunities in the EDF and initiatives to enhance their participation;
- Exploiting the potential of the European Cybersecurity Network and Cybersecurity Competence Centre (under establishment).
- Promoting hybrid civil/defence standards. DG DEFIS will work with relevant actors to ensure that defence requirements are considered in development of civil standards supported by the Commission. This includes close collaboration with DG GROW in the context of the forthcoming Standardization Strategy announced in the New Industrial Strategy in 2020. DG DEFIS will also closely collaborate with external organisations having a reach-out to military end users, like the European Defence Agency and its European Defence Standardisation Committee that will be included in preparatory work from the very outset. If done successfully, Member States will be willing to use these hybrid standards instead of developing own military standards and imposing them on industry;
- Innovative forms of funding for disruptive technologies, and defence innovation networks. To support defence innovation, funding for disruptive technologies under the European Defence Fund is foreseen. DG DEFIS will implement calls for proposals for disruptive technologies for defence. Concrete actions on innovative forms of funding for disruptive technologies and activities on defence innovation networks will be developed under the Action Plan on Synergies.

DG DEFIS will continue overseeing and accompanying the development of the emerging market of civil drones. It will support the implementation of the product harmonisation legislation set by Chapter II of Regulation (EU) 2019/945 and **contribute to the development of the Drone Strategy 2.0** led by DG MOVE aiming at identifying possible ways to guide the further development of this technology. DG DEFIS will focus particularly on identifying areas of civil-military cross-fertilisation in support of the Drone Technologies Action, as set by the Action Plan on Synergies.

DG DEFIS will also contribute to the **European Chips Act**. Semi-conductors being a crucial element of the Digital transition, the EU economy cannot afford current gaps in terms of design and manufacturing of most advanced semi-conductors. This problematic is acutely perceived by the defence and space sectors too. The objective for DG DEFIS is to ensure that, despite the small market size, specific needs of the space and defence sectors are properly taken into account in the Act, because of their strategic role in ensuring security for Europe.

In 2022, a study on semi-conductor supply chains will be undertaken to obtain a precise snapshot on semiconductors' needs for the defence and space sectors in the European Union in the short, medium and longer term.

DG DEFIS is actively contributing to the **screening of Foreign Direct Investments**¹⁶. The EU wants to remain and attractive destination for foreign direct investment. However, in exceptional cases, foreign investments may represent a **risk for security or public order** in Member States or in the whole Union. This is where a link exists between the foreign direct investment screening and strategic autonomy, and therefore with activities such as the Observatory for Critical Technologies.

Communication

Communication activities will accompany the emergence of a business- and innovation-friendly model in Europe, promoting opportunities created by CASSINI beyond the space ecosystem. A specific focus will be placed on the promotion of success stories highlighting the development of advanced skills in space-related fields and supporting education and training activities (e.g. hackathons). To reach this target of young entrepreneurs of the non-space ecosystem, CASSINI will be promoted at key technology events (see list in the performance table below), through the organisation of exhibition stands aiming at raising awareness about CASSINI-related opportunities and host info-and training sessions.

DG DEFIS will also continue to ensure the strong promotion of EU space-based opportunities at various specialised events gathering the space ecosystem. . In partnership with EUSPA, and under the auspices of the Czech Presidency of the Council of the EU, DG DEFIS will also organise the 2022 edition of the EU Space Week in Prague in October 2022. These actions aim at ensuring a permanent dialogue with the different target audiences.

Particular efforts will be directed to assure strong social media presense and outreach activities will be complemented through partnerships with big media groups such as Euronews, BBC, CNN (signed with delegated partners (e.g. ECMWF). In parallel, the established network of ‘ambassadors’ of the EU Space Programme will boost the uptake of applications. Further synergies will be built between the network of Copernicus Relays, the network of Copernicus Academy and the recently created Galileo Info Centres. Additional efforts will be invested in promoting the EU Space Programme in mainstream media, and in raising awareness about the potential of EU Space data for downstream businesses.

General objective: A Europe fit for the digital age
Specific objective: 2.2: EU Space Programme maximises socio-economic benefits
Related to spending programme(s): EU Space Programme, European Defence Fund, Horizon Europe

Main outputs in 2022:

External communication actions

Output	Indicator	Target
Promotion of EU space-based opportunities at space events:	– Number of events	– 5 events

⁽¹⁶⁾ [EUR-Lex - 32019R0452 - EN - EUR-Lex \(europa.eu\)](#)

Output	Indicator	Target
<ul style="list-style-type: none"> - 14th European Space Conference - Munich Satellite Navigation Conference - ESA living Planet Symposium - ESA Phi Week - New Space Europe Conference 	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 20.000 participants
Promotion of EU space-based opportunities at tech-events: <ul style="list-style-type: none"> - Hannover Messe - VivaTech - Intergeo - WebSummit - Slush 	<ul style="list-style-type: none"> - Number of events - Number of participants 	<ul style="list-style-type: none"> - 5 events - 100.000 participants
Organisation of EU Space Week	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 1.500 participants
Animation of a webpage dedicated to EU space contribution to the digital age and to CASSINI	<ul style="list-style-type: none"> - Number of visits 	<ul style="list-style-type: none"> - 15.000 visits
Other important outputs		
Output	Indicator	Target
CASSINI EU space hackathon events	<ul style="list-style-type: none"> - Number of CASSINI Hackathon events carried out physically/online; - number of teams supported 	<ul style="list-style-type: none"> - 2 hackathon events in 2022 - 200 teams/year supported
CASSINI prizes	Number of prizes published and awarded	3 winners to be selected for the best digital applications based on space data and signals.
CASSINI business accelerator	Number of participating startup companies enrolled in CASSINI Business Accelerator	20 participating companies per batch (in 2022). Action launched in Q1/Q2 2022.
CASSINI matchmaking	Number of participating startup companies in CASSINI Matchmaking	100 participating companies (in 2022). Action launched in Q1 2022.
CASSINI seed and growth funding facility: Venture capital funds signing investment agreements with EIF (InvestEU)	Number of venture capital funds selected by EIF in 2022	4 investment agreements (in 2022). InvestEU and CASSINI facility to be launched in Q1 2022.
CASSINI seed and growth funding facility: companies receiving investments from venture capital funds (InvestEU)	No. companies selected by venture capital funds and subscription agreements signed.	50-60 new venture capital investments in space-related companies per year (when fully operational). Stage 1 objective in 2022: first 5 investments concluded by VC funds under CASSINI fund.

Output	Indicator	Target
CASSINI in-orbit demonstration and validation	Number of open calls for expression of interest in 2022	Number of open calls for expression of interest in 2022 + number of selected projects
Call for expression of interest for IOD/IOV experiments	Number of calls published	1
Obtain demographic characterisation of equality in the defence, aeronautics and space EU sectors	- Final report of survey Analysis of the implementation of EU equality legislation in the defence, aeronautics and space EU sectors	Q4 2022
Contribute to the development of a European cyber defence policy	Adoption of new European cyber resilience Act	Q3 2022
Contribute to the development of the drone strategy 2.0 (Action 9 under the action plan on synergies for civil, defence and space Industries)	Adoption by the Commission	Q4 2022
Contribute to the European chips Act	Adoption by the Commission	Q2 2022
Launching of a study on semi-conductor supply chains for the benefit of the EU space domain	Launch study	Q1 2022

C. A stronger Europe in the world

Specific objective 4.1: Fostered innovation capacity and competitiveness of the European defence industry and strengthened EU defence supply chains due to increased cross-border R&D cooperation involving in particular SMEs and mid-caps

The specific objective in this section focus on the defence industry sector. Nevertheless, it is important to keep in mind that all DG DEFIS policies contribute to ‘A Stronger Europe in the World’. In the current geopolitical context, the EU seeks to take greater responsibility for its own security and strengthen its role as a geopolitical player. As announced in the State of the Union Address by President von der Leyen, the Commission in 2022 will focus in particular on strengthening the EU’s role in the area of security and defence and working towards a closer ‘European Defence Union’.

A competitive, resilient and innovative European defence ecosystem, which dynamically interacts with related space and aeronautics and other ecosystems, is key to establish a European Defence Union. DG DEFIS defence industrial and internal market policies are aimed at reducing internal market barriers and fragmentation, and address existing and potential future harmful dependencies. The policies should build the condition for Europe to act and cooperate with international and regional partners, such as NATO, wherever

possible while being able to operate autonomously when and where necessary. With this objective in mind, DG DEFIS staff will continue to engage with those of partner organisations, including NATO staff.

In 2022, DG DEFIS will continue contributing to the development of initiatives supporting **innovation** for defence applications and implementing a mix of policy tools to foster **the sustainable competitiveness and resilience of the EU defence industry** and the **development of the European defence market**, together with that of the aeronautics and drone industry. This includes measures ensuring the coherence between its own policy tools and other defence-relevant initiatives.

As regards funding tools, the priority in 2022 is to ensure the successful roll out of the European Defence Fund (EDF). The further implementation of the EDF precursor programmes, the Preparatory Action on Defence Research (PADR) and the European Defence Industrial Development Programme (EDIDP) will be pursued.

As concerns the PADR (2017-2019), aimed at preparing the research window of the EDF, all 18 collaborative research projects selected for funding have been launched¹⁷. While the management of a number of projects will be ongoing beyond 2022, at least 9 projects are expected to be completed by the end of 2022. In particular, projects on various subjects from camouflage to radio-frequency processing are planned to finish at the end of the year 2021 and during the year 2022. The results of the PADR will inform the further implementation of the European Defence Fund (EDF).

The EDIDP is the precursor programme focused on preparing the capability development window of the EDF. With a budget of EUR 500 million for 2019-2020, it was created to foster the competitiveness, efficiency and innovation capacity of the Union's defence industry, which contributes to the Union's strategic autonomy. Based on the grant agreements signed by the end of 2021, DG DEFIS will manage 26 awarded projects following the 2020 calls. In addition, the implementation of 16 projects awarded from 2019 calls will continue during 2022. The Organisation for Joint Armament Cooperation (OCCAR) will be in charge of the implementation and monitoring of two projects that received a direct award from EDIDP: ESSOR (European Secure Software-defined Radio) and MALE RPAS (European Medium-altitude Long Endurance Remotely Piloted Aircraft system). The Commission signed two Contribution Agreements with OCCAR to this effect, and in 2022, DG DEFIS will continue to monitor their implementation.

Following the entering into force of the EDF Regulation in April 2021, the first annual EDF work programme was adopted on 30 June 2021 and 23 calls for proposal were published the same day. Award decisions on projects selected for funding are expected to be adopted

⁽¹⁷⁾ These projects are the result of 10 calls for proposals published over the three year duration of the PADR. Through a delegation agreement, 15 projects are managed by the European Defence Agency while three projects with a high disruptive potential in the defence context, such as artificial intelligence and quantum technologies, are managed directly by the Commission.

by mid-2022. Related grant agreements will be signed by the end of 2022. In parallel, work on the **annual 2022 work programme for the European Defence Fund** will have to be pursued with Member States in the EDF Programme Committee. The objective is to adopt the work programme in April 2022 and to publish related calls for proposals in May 2022.

In 2022, DEFIS will explore with DG TAXUD the possibilities for putting forward a proposal for a **VAT waiver for defence products** developed and produced and procured within the EU for improving interoperability and reducing dependencies.

DEFIS will contribute to the Commissions initiative for setting up a common **situational awareness centre** in order to gather all the different pieces of information.

Other important initiatives

Stepping up space defence activities

Space is becoming an increasing crucial part of defence activities. Around EUR 150 million have been dedicated to space-related actions funded under the EDF precursor programmes (PADR and EDIDP) and the first (2021) work programme of EDF focusing mainly on Galileo PRS receivers, Navigation Warfare (NAVWAR) capabilities, space situational awareness and early warning, European protected waveform, Earth Observation for maritime surveillance and space data processing. The European Defence Fund will support research and development actions targeting space-based capabilities for defence applications, contributing to EU and Member States priorities. In line with the tentative multi-annual programming agreed with Member States, up to 10 % (around EUR 800 million) of the EDF's overall budget may be dedicated to space defence projects over the entire EDF programme term. In addition, the current EU Space Programme is catering for security and defence users, with the Galileo PRS, the Copernicus security service, EU SST and GOVSATCOM. A reflection is ongoing to investigate how to benefit even further on the synergies between space and defence, for example by ensuring that defence-related requirements or EDF developed technologies are taken into account, where relevant, in future space capabilities such as the space-based secure connectivity system.

International cooperation

International cooperation is recognised as an important dimension of the EU Space Programme, securing its operational integrity and performance, supporting the larger EU foreign policy agenda and opening up opportunities for EU companies in foreign markets. **Space Economic diplomacy** in particular, is an important element of the toolbox supporting the space ecosystem in exploring business development opportunities in third countries. Specific activities currently being implemented in close cooperation with the EEAS and EU Delegations through a 'Global Action on Space' (2021-23) financed through the Foreign Partnership Instrument include: the promotion of the EU Space Programme and its components worldwide; the organisation of targeted trainings in each continent; intelligence gathering on space; and the provision of tailor-made coaching services for companies and organisations wishing to engage in international cooperation on space.

The Regulation establishing the EU Space Programme includes a call on the Commission to **explore the possibility for accession of the European Union to the relevant UN Treaties** and Conventions. DG DEFIS will prepare a proposal for a Council decision on the declaration by which the European Union accepts the rights and obligations laid down in the Agreement on the rescue of astronauts, the return of astronauts and the return of objects launched into outer space, by the Convention on International Liability for Damage Caused by Space Objects, and by the Convention on the Registration of Objects Launched into Outer Space.

DG DEFIS is seeking to reinforce the role of EU space-enabled services to support the **EU Arctic Policy**, a region of growing strategic, geo-political and economic importance.

Military mobility

DG DEFIS coordinates the Commission's activities contributing to improved military mobility within Europe, closely cooperating with EEAS/MOVE. The Strategic Compass on security and defence, to be adopted by the Council in March 2022, is expected to provide guidance on possible new actions to improve military mobility within and beyond the EU. The fourth progress report on the implementation of the Action Plan on Military Mobility, to be presented by the High Representative and the Commission by the end of summer 2022, could consider additional measures, revisions and updates to the Action Plan on Military Mobility.

Communication

As part of the international space outreach activities, a strong presence will be ensured at international fora and major space events.

Presence at important defence-related fairs and salons to increase visibility will be ensured to raise awareness among SMEs and other stakeholders about the European Defence Fund. The targeting of non-traditional defence actors will be a key focus.

Social media presence will be stepped-up to inform about DG DEFIS defence-related activities and EU funded projects in institutional contexts. DG DEFIS will pay special attention that communication on social media related to this policy is accurate, ensuring close and constant monitoring of the situation. Fighting against disinformation on this sensitive topic is crucial.

The implementation of **skills-related actions** and **actions targeting the SME defence industry** will rely in particular on communication and outreach activities¹⁸. Several joint communication initiatives are expected to take form in the frame of the newly established Network of European Defence Fund Focal Points (NFPs) to facilitate the EDF programme implementation at national level; European thematic conferences will be organised in the second half of 2022 within the existing network of the European Network of Defence-

(¹⁸) In view of the COVID-crisis specific attention will be given to organising events in a virtual or hybrid way

related Regions; an EDF Info Day and matchmaking event is planned in the first half of 2022 and several national EDF Info Days “Roadshows” are envisaged throughout 2022.

General objective: A Stronger Europe in the World

Specific objective: 4.1: Fostered innovation capacity and competitiveness of the European defence industry and strengthened EU defence supply chains due to increased cross-border R&D cooperation involving in particular SMEs and mid-caps

Related to spending programme(s): EU Space Programme, European Defence Fund

Main outputs in 2022:

External communication actions

Output	Indicator	Target
Promotion of EU space-based opportunities at the Arctic Circle Conference, 13-16 October, Reykjavik (Iceland) through a stand and a side session	<ul style="list-style-type: none"> - Number of participants (stand) - Number of participants (side session) 	<ul style="list-style-type: none"> - 1.000 participants (stand) - 100 participants (side session)
Promotion of EU space-based opportunities at ION GNSS+ 2022, 19-23 September, Denver (USA), with a stand and a side session	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 1.500 participants
Promotion of EU space-based opportunities at EU Development Days, in June 2022, Brussels, (Belgium) with a stand and a side session	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 2.000 participants
Increase awareness of the achievements of PADR, EDIDP (the precursors of EDF) and EDF	<ul style="list-style-type: none"> - Number of engagement on social media 	<ul style="list-style-type: none"> - 300.000 engagements on social media channels
Organisation of EDF Info Day	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 2.000 participants
Participation in national EDF Info Days throughout 2022 with expert speakers (depending on the number of events organised by Member States)	<ul style="list-style-type: none"> - Number of events - Number of participants per event 	<ul style="list-style-type: none"> - 5 events - 200 participants
Organisation of thematic conferences	<ul style="list-style-type: none"> - Number of events - Number of participants 	<ul style="list-style-type: none"> - 24 events - 2400 participants
Promotion of EU’s defence industry initiatives at fairs	<ul style="list-style-type: none"> - Number of participants 	<ul style="list-style-type: none"> - 2.000 attendees

Other important outputs

Output	Indicator	Target
Commission Implementing Decision on the annual work programme for the European Defence Fund 2022	Adoption by the Commission	Q2 2022

Output	Indicator	Target
Issue forth implementation Report on the action plan on military mobility (Joint Report COM/HR)	Adoption by the Commission	Q3 2022

D. Promoting our European way of life

Specific objective 5.1: Security actors have access to EU autonomous tools, space-enabled services, and technologies, needed to build resilience to security threats, safety hazards and crisis situations

Hybrid threats

DG DEFIS is responsible for the overall coordination of Commission activities with regard to the EU's ability to prevent, detect, respond, build and strengthen EU resilience to hybrid threats.

Hybrid threats represent a complex challenge, both for the EU and its Member States, and hybrid actors use several tools to achieve their objectives. Recently, migration has been instrumentalised to try and undermine our unity, democratic values and decision-making processes. Although countering hybrid threats is mainly a national responsibility, the threats are cross-border and common to all Member States and also target the EU level. The EU and its Member States will need to be better prepared to increase common awareness, build resilience and respond in a coordinated and solidary way to these threats, which are multiplying in different forms. Hybrid threats are at the centre of the discussions between Member States in the context of the Strategic Compass in security and defence. In 2022, DG DEFIS will continue to support Member States in their reflections of how the Commission can contribute to counter hybrid threats, including through a hybrid threats toolbox. DG DEFIS will continue to represent the Commission in a dedicated Council Working Group.

DG DEFIS will also continue to actively engage all relevant Commission services to increase awareness, share best practices and identify ways to enhance resilience in all domains under their responsibility that are prone to hybrid attacks (including critical infrastructure, disinformation, etc.). This will be done in a number of ways, including by organising training programmes for the network of Hybrid Threats Points of Contact together with the JRC and Hybrid Centre of Excellence (HCoE), the possible setting up of a restricted online platform into a new ARGUS application, the further development of the identification of the hybrid resilience baselines and the contribution to the Strategic Compass, including the reflections on a Hybrid Threats Toolbox.

DG DEFIS will provide input to the progress reports on the Security Union Strategy and will coordinate and prepare the next edition of the progress report on the implementation of the 2016 Joint Framework on countering hybrid threats and the 2018 Joint Communication on increasing resilience and bolstering capabilities to address hybrid threats.

Secure communications and cybersecurity

The procurement of the ground segment of GOVSATCOM was launched in 2021, and the activities for the design, development, deployment and validation of **GOVSATCOM** will start in the course of 2022. In parallel, research activities on upstream technologies for secure communications and for innovative service provision for GOVSATCOM are planned to be funded in 2022. The GOVSATCOM component is the first building block of the new initiative on an EU space-based global secure communication system for secure governmental communication (see section B).

In 2022, the Commission will also prepare the **implementing acts for the definition of the characteristics of the GOVSATCOM service portfolio, operational requirements and security requirements.**

Safety and security (dual use) related services

DG DEFIS will propose in the first quarter of 2022 a Communication for the '**Development of an EU approach on Space Traffic Management (STM)**'. The objective is to establish a **European position for preparing the EU for further discussions in international fora towards establishing international norms and standards of space traffic management.** It will also pave the way to the foundations of a future European Space Traffic Coordination. STM will protect the EU assets in space, support the Union's open strategic autonomy, and reduce the risks of technological dependencies and loss of industrial competitiveness emanating from externally imposed standards and policies.

With the operational **EU Space Surveillance and Tracking (EU SST)** capacity and in the near future, a reinforced **Space Situational Awareness (SSA)**¹⁹ component as adopted under the new EU Space Programme, the Union will also have an increasingly autonomous way to monitor and protect its space assets. This is a major and tangible contribution to the strategic autonomy and resilience of the Union.

In 2021, the duration of the current EU SST consortium was extended to allow for a smooth transition to the **future EU SST Partnership**. In early 2022, DG DEFIS intends to propose to the Commission the adoption of an implementing act that will detail the procedure for the establishment of the future EU SST Partnership. Based on this implementing act, the Member States will have to submit a Partnership's proposal for providing the EU SST services to the European Commission. DG DEFIS also intends to support the users of the EU SST services in the context of the Front Desk of the future EU SST Partnership (Commission autonomous Decision).

As part of the Galileo Second Generation Service portfolio, a proper, stand-alone timing service will leverage on current Galileo timing capabilities that will be complemented with

⁽¹⁹⁾ The SSA component will cover EU SST, Space Weather and Near Earth Objects (NEO), as well as an overall strengthening of security requirements when developing EU space systems.

monitoring capabilities aimed at providing critical infrastructure with a level of trust not provided by any other constellation.

When it comes to **personal safety**, the **Galileo's Search and Rescue service** reduces drastically the time to detect emergency distress beacons from up to three hours to just ten minutes. As the location of the distress beacon is determined more accurately, people lost at sea or in the mountains can be rescued more quickly. In 2022, the coverage provided by the European ground stations (MEOLUT) will be enlarged with the installation of a new station in La Réunion Island (overseas department of France). This will allow to provide alerts detection and localisation over a wide area in the Indian Ocean, ensuring safer activities in all domains (maritime, aviation, pedestrian).

The **Emergency Warning service** for broadcasting alerts to population at threat (natural or man-made hazards) is a direct contribution to the United Nation's programme for Disaster Risk Resilience, for which one key target is to **"substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030"**. In 2022, the activities will focus on finalising the service architecture and the provision scheme, including security, leading to a procurement phase for introducing the service in the first generation of Galileo satellites. The start of the initial service is foreseen by end 2023.

The **Copernicus emergency service** will continue supporting actions of the EU at local, national and international level in case of major natural disasters. In addition, the three **Copernicus Security services** (Border Surveillance, Maritime Surveillance, Support to EU External Action), delegated to Frontex, EMSA and Satcen, support security Institutional players in areas such as border and maritime surveillance, security of marine livestock (fisheries control), law enforcement, support to security actions of the EU and others. These three services rely on revamped portfolios to better respond to user needs and for improved inter-agencies cooperation.

Access to space and satellite launches in 2022

EU autonomous access to space is a priority of EU space policy. The Commission is negotiating and aims to conclude in 2022 an **Inter-Institutional Framework contract for EU launches services with Arianespace**. The purpose is to aggregate the orders of launch services for both Copernicus and Galileo, a win-win for the EU industry and the EU itself by offering predictability, visibility and reinforcing EU's role on the global scene.

DG DEFIS has also intensified consultations with all main parties and stakeholders of the entire European launch system value chain. This includes notably EU space industry, EU Member States, national space agencies, and ESA. On the basis of these consultations and preparatory work, the Commission is considering to launch and set up in the first quarter of 2022 **a European Alliance on Space Launchers**, bringing together all players, big and small, to work towards a globally competitive, cost-effective and autonomous EU access to space. The Alliance will act as a platform for all relevant public and private stakeholders of the European space launch value chain, preparing the next generation of EU launchers and

related technologies. It may cover all ranges of lifts from micro-launchers to small, medium and heavy launchers. Ultimately, it may define the relevant drivers and address supply, demand, and financing challenges with short to mid- and long-term objectives.

The current launches planning of the EU Space Programme assumes **two Galileo launches in 2022**; one launch (#12) tentatively planned in early 2022 and one (#13) in the third quarter of 2022. The development of a specific dispenser to carry the Galileo satellites on-board Ariane-6 started in 2019 is expected to be ready for the 2023 launches. For Copernicus, preparation activities will be carried out to get the Copernicus satellite Sentinel-1C ready for its launch foreseen for 2023.

Communication

Specific attention will be drawn to the organisation of a launch event for the European Alliance on Space Launchers, highlighting the importance of this initiative to ensure EU’s strategic autonomy.

As part of a communication strategy to reach a wider audience, DG DEFIS will stage a mind-catching, real-time demonstration event of EU’s achievements in space-based lifesaving services. The event will also serve to test the design of the user-interface (beacon), collecting valuable feedback from demo-volunteers for further improvements. The strong promotion of services addressing other emergency situations, such as non-sensitive activations of the Copernicus Emergency Management Service in partnership with DG ECHO and DG JRC, is also planned. To reap the maximum benefits, activities targeting citizens through periodic campaigns will be organised in different Members States in close cooperation with national authorities and at EU level, via corporate campaigns.

Communication actions will also be developed to accompany the launch of SST/SSA/GOVSATCOM-related activities. The focus will be on raising awareness on the potential of the GOVSATCOM services. This will contribute to a timely service uptake when the system will be ready to deliver the initial services.


General objective: Promoting our European way of life

Specific objective: 5.1: Security actors have access to EU autonomous tools, space-enabled services, and technologies, needed to build resilience to security threats, safety hazards and crisis situations
Title from strategic plan

Related to spending programme(s): EU Space Programme, European Defence Fund

Main outputs in 2022:

New policy initiatives

Output	Indicator	Target
 Communication on Development of an EU approach on Space Traffic Management (STM)	Adoption by the Commission	Q1 2022

External communication actions		
Output	Indicator	Target
Organisation of the launch event of the alliance on space launchers	- Number of participants	- 700 participants
Touring Exhibition “EU Space for You”	- Number of locations - Number of participants	- 5 different locations - 50.000 participants
Promotion of DEFIS policies at EU Open Doors Day	- Number of participants	- 5.000 participants
Partnership with Brussels city to promote EU space-based opportunities at “Winter Wonders” through interactive exhibition and information sessions	- Number of participants	- 500.000 participants
Partnership with EU-located museums to permanently promote opportunities offered by EU Space	- Number of partnerships signed	- 2 partnerships
Promotion of EU space / Copernicus Emergency Management Service activation	- Number of engagement/impressions on social media	- 3.000.000 engagements/impressions on social media channels
Organisation of the Galileo SAR live demonstration event	- Number of participants (physical and online) - Number of engagement/impressions on social media - Number of events - Number of journalists/influencers following the event	- 5.000 participants - 1 million engagements/impressions on social media channels - 1 live demonstration organised - 20 journalists/influencers
Communication actions to launch the new EU Space Programme components SSA and GovSatCom	- Number of events - Number of participants - Media coverage	- 2 events - 150 participants - 50 media mentions
Animation of a dedicated webpage on DEFIS Europa platform promoting DEFIS contribution to this objective	- Number of visits	- 5.000 visits
Other important outputs		
Output	Indicator	Target
Implementing act on the procedure for the establishment of the future EU SST partnership	Adoption by the Commission	Q1 2022
Conclude negotiations with Arianespace on the Inter-Institutional framework contract for EU launch services	Adoption by the Commission (conclusion of the framework contract)	Q1 2022
Launch and set up a European alliance on space launchers	Launch European alliance on Space launchers	Q1 2022

PART 2. Modernising the administration: main outputs for 2022

The internal control framework ⁽²⁰⁾ supports sound management and decision-making. It notably ensures that risks to the achievement of objectives are taken into account and reduced to acceptable levels through cost-effective controls.

DG DEFIS 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.

E. Human resource management

DG DEFIS is supporting innovation and technological developments in the high-tech sectors of space and defence industry. Thus ensuring that the necessary expertise is available within the DG is a key aspect of HR management. Expertise is provided through a large presence of seconded national experts (17% of staff) and in-house knowledge of technically-trained staff. This expertise will be reinforced by the selection of officials through specialised EPSO competitions (planned for 2022) to attract highly skilled candidates with experience in the field of space and defence. Moreover DG DEFIS is in the process of establishing its local HR strategy around the following core values: enabling people, improving working conditions, learning and development. Staff have been invited to bring their ideas and suggestions to each of the axes of the proposed corporate HR strategy. The strategy will take into account the future evolution of the COVID-19 situation and its impact on the organisation of work. DG DEFIS is also working closely with the central services to get the appropriate level of staff to manage its activities.

Enabling People

Depending on the evolution of the sanitary conditions, an Away Day will be organised as soon as possible to allow DG DEFIS staff to better know each other, improve staff awareness of the DG objectives and enhance the inter-unit collaboration. This event will also allow staff to re-connect (and connect for the newcomers) after the long teleworking periods of 2020 - 2021. In this respect, DG DEFIS is in the particular situation that shortly after its creation (1 January 2020) the work pattern changed to the teleworking mode predominantly and the natural links between colleagues need to be reinforced.

More generally, DG DEFIS wants to retain its talents and enable everyone to unlock their full potential by matching people's competencies and aspirations with corporate business needs. The HR Business Correspondent team will therefore focus on allocating human resources taking due account of the Commission's work programme and DG DEFIS's policy priorities. In order to maintain the requisite technical expertise of staff to deliver on Defence, notably focusing on the implementation of the EDF, a competition will be

⁽²⁰⁾ [Communication C\(2017\)2373 - Revision of the Internal Control Framework](#)

organised for specialised profiles in the field of Defence and project management as well for the Space domain in the first quarter of 2022.

Quotas for staff and budget for external staff will be managed by the HR Business Correspondent in close cooperation with Senior Management to allow for some flexibility and reactivity to changing needs in light with the implementation of the European Defence Fund and the EU Space Programme. In order to reach its objectives and due to its specific needs – technical, operational, legal, financial etc. – DG DEFIS will promote internal mobility and flexible staff allocation. In relation to gender balance, when selecting middle managers, the DG respected and even exceeded the quantitative DG-specific targets for female first appointments to middle management functions. The DG will be attentive to respect the gender balance reached for middle management functions (50% at present for the 10 occupied posts).

Improvement of working conditions

Ensuring that people's efforts and commitment are supported by good working conditions is one of the core values of our HR strategy.

Following the lessons learnt from the COVID-19 crisis and the periods of full lockdown that the staff experienced in the last years, DG DEFIS will keep on contributing to HR reflections on the working environment for a more dynamic and interconnected framework respecting the particularity of DG DEFIS core business, such of handling of sensitive information and need for secured areas.

The implementation of the DG DEFIS workplan on Equality, Diversity and Inclusion, which includes a series of actions going beyond gender equality, will be continued. The focus will be on raising awareness among staff and to make full use of work/life balance instruments available for staff.

Learning and development

By means of internal communication channels, DG DEFIS will promote virtual and e-learning opportunities for colleagues (i.e. webinars, e-learning modules, lunch-time labs) and talent management projects (i.e individual management coaching as well as coaching for the deputy heads of units to guarantee the excellent HR culture in the newly created and growing structure of DG DEFIS).

The local DEFIS HR strategy will take into account on-the-job training and activities to assure a positive integration of new comers.

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

Main outputs in 2022:

Output	Indicator	Target
Promote virtual and e-learning opportunities for colleagues (i.e. webinars, e-learning modules)	Number of virtual and e-learning trainings followed by DEFIS staff	10 % of trainings followed by virtual means
Launch specialised EPSO competitions	Official publication	1 competition completed in 2022 in defence and space domain
Issue local HR strategy	Publication	Q2 2022
Organise an away day	Staff attendance	90 % of DG DEFIS staff attendance (if the sanitary conditions in 2022 allow)

Internal communication actions

Output	Indicator	Target
Maintenance and animation of DG DEFIS intracomm website	- Number of visits	- 5.000 visits
Publication of weekly internal newsletters 'DEFIS BUZZ'	- Number of recipients and readers	- 150 readers per edition
Organisation of DEFIS Lab seminars	- Number of editions - Number of participants	- 6 editions - 400 participants
Organisation of a DG DEFIS Away-day	- Number of participants and satisfaction survey	- At least 60% of participants
Organisation of regular meeting(s) of the Director-General with the staff	- Number of meetings - Number of participants and quality of interactions	- 4 meetings - 175 participants each
Promotion of EMAS and organisation of EMAS events to promote corporate campaigns	- Number of events	- At least 1

F. Sound financial management

In line with its control strategy, DG DEFIS will ensure that the objectives set in the table below are met. Moreover, the tight supervision (through both budgetary and cost control) of entrusted entities supporting the implementation of DG DEFIS programmes will continue. In 2022, DG DEFIS will be attentive to ensure a smooth start of the European Defence Fund. The necessary financial controls will be carried out at grant preparation stage to provide assurance to the authorising officer for grant signature.

DG DEFIS will support and contribute to developing a corporate common approach in financial management, through eProcurement, the Public Procurement Management Tool (PPMT) and the management of expert groups (AGM, RegExp...).

All the above actions and controls will ensure that DG DEFIS can manage adequately the risks related to the legality and regularity of the underlying transactions, taking into account the multiannual character of the programmes, as well as, the nature of the payments concerned. The main control objective is to ensure that the estimated risk at closure is below 2% of the relevant expenditure (materiality threshold).

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 2022:

Output	Indicator	Target
Effective controls: Legal and regular transactions	Risk at payment	< 2 % of relevant expenditure ⁽²¹⁾
	Estimated risk at closure	< 2 % of relevant expenditure
Effective controls: Safeguarded assets (<i>where relevant</i>)	Percentage of write-off of the value of the assets due to inventory mismanagement	<1% of the total value of the assets
Efficient controls	-Budget execution	< 1% of budget in commitment and payment appropriations is not executed
	-time-to-pay	< 2 % of payments (in terms of payment value) are delayed
Economical controls	Overall cost of control as a percentage of the total commitment appropriations consumed at the end of the year	Less than 10% of funds managed
	Overall cost of control as a percentage of the total annual amount delegated excluding any remuneration paid	Less than 5% of funds managed

⁽²¹⁾ The Research, industry, space, energy and transport family has a different threshold for risk at payment.

G. Fraud risk management

Following the creation of DG DEFIS, the anti-fraud strategy of the DG was established in 2020. This strategy was elaborated based on the methodology provided by OLAF. This is the basis for developing a strong anti-fraud culture within the Directorate-General.

DG DEFIS will focus on ethics and fraud prevention through proportionate and targeted preventive ex-ante controls. The unit responsible for risk management and anti-fraud will ensure that middle management is well aware of the importance of developing an anti-fraud culture. In addition, as indicated in the anti-fraud strategy, all newcomers will have to attend a mandatory training on fraud awareness and ethics.

Furthermore, the unit responsible for risk management and anti-fraud will ensure that any recommendations from IAS or OLAF are timely implemented and will exchange best practices by participating in existing Commission anti-fraud networks (FPDNet/OLAF). In the DG, a fraud risk assessment will be performed within the annual risk assessment exercise. Moreover the unit will continue to assess ESA's and EUSPA's level of development of anti-fraud measures/policies.

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) ⁽²²⁾ aimed at the prevention, detection and correction ⁽²³⁾ of fraud.

Main outputs in 2022:

Output	Indicator	Target
Raise fraud awareness and knowledge on ethics – open for all staff and compulsory for newcomers	Training session for all staff on the importance of high standards of ethics and on the role of IDOC in disciplinary affairs	Organise once a year a training session for DG DEFIS staff and newcomers
Recommendations from IAS or OLAF	Timely implementation of the recommendations made	Implement the recommendations in the same year, whenever practicably feasible
FPDNet meetings	Presence in the meetings	>85 %

⁽²²⁾ 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'.

⁽²³⁾ Correction of fraud is an umbrella term, which notably refers to the recovery of amounts unduly spent and to administrative sanctions.

H. Digital transformation and information management

DG DEFIS' responsibilities under this area are to a large extent shared with the Directorate-General Internal Market, Industry, Entrepreneurship and SMEs (GROW). In order to reach economies and efficiencies on resources, a Memorandum of Understanding (MoU) was signed between DG DEFIS and DG GROW, applicable as from 1 January 2020. The objective of the MoU is to ensure business continuity in the two DGs with a smooth transition considering the most efficient use of existing staff resources, as well as the necessary synergies and efficiencies in terms of strategic horizontal services. In close cooperation with DG GROW, the digital transformation of DG DEFIS has been further pushed forward.

DG DEFIS contributes to the corporate data governance and data policies as a member of internal market team to Information and Management Steering Board (IMSB).

DG DEFIS will secure operations of available tools under his responsibility, as follows:

IT tools under development

1) SUE (exchange of EU confidential info)

DG DEFIS participates in this corporate initiative that will prepare a classified IT system. The target system should handle end-to-end communication, meaning that all secured areas of the Commission and other users should be equipped with the system²⁴. SUE will be able to support the Foreign Direct Investment (FDI) Screening Regulation, The European Defence Fund (EDF) and its precursors, the Preparatory Action on Defence Research (PADR), the European Defence Industrial Development Programme (EDIDP) and other exchanges of information up to SECRET UE/EU SECRET level.

In addition, it will include links with the corporate tool eGrant suite that will be adapted to the needs of DG DEFIS' programmes (allowing to handle sensitive documents).

2) E-CERTIS system (owned by DG GROW)

E-CERTIS system is an online mapping service for criteria, issuers and evidence in the EU, to be used for future defence procurements.

3) CEMS Mapping Website Revamp

The Copernicus Emergency Management service (CEMS) is one of the core services of the Copernicus programme²⁵. CEMS is managed by JRC in the frame of two cooperation agreements with DG DEFIS (AA Copernicus II and related cross-sub delegation).

4) Local_Eval_EDIDP

This tool provides support to the evaluation of proposals received under the European Defence Fund calls. One of the missions of DG DEFIS is to implement the

⁽²⁴⁾ The system should ensure automatic registration of the files in line with the classified registry requirements of Decision (EU, Euratom) 2015/444.

⁽²⁵⁾ <https://www.copernicus.eu/en>

European Defence Fund (EDF) over the period of 2021-2027 (EUR 7, 9 Billion) in direct management. The mission of the unit in charge includes all the aspects related to the preparation of calls, the evaluation of proposals including the appointment of external independent experts, the preparation of grant agreements and the management of grants. Considering the mere nature of the sector and the sensibility of the information processed, the unit is dealing with a large volume of sensitive or classified information. This has a significant impact on the creation, processing, storage and administration of documents. Hence, the evaluation process and all related proceedings are classified minimum at the level of RESTREINT UE/EU RESTRICTED. This level could be higher in order to match the classification level of the proposals (if required). The corporate tool SEP cannot be used to this end, because the management of classified information is not supported.

Reuse of existing tools²⁶.

The possible adaptation (partially or fully) for using the corporate eGrant suite (e.g. SYGMA, COMPASS, SEP, EMI) for the management of the European Defence Fund is being analysed with the concerned DGs.

To ensure **rigorous implementation of the data protection rules**, the DG DEFIS data protection contact point will, in close cooperation with DG GROW Data Protection Coordinator (DPC), focus efforts on three areas:

- Increase awareness at all levels of DG DEFIS staff, focusing on the needs of every type of actor and on the practical implementation, e.g. the most recurrent and risky activities, such as public procurement, meetings and events, consultations, IT tools, international transfers and on data subject procedures;
- Promote the use of Unit inventories of processing operations to improve continuous compliance monitoring and in particular the implementation of the Commission's Data Protection Action Plan (C(2018) 7432 final);
- Ensure that DEFIS IT systems and websites comply with data protection rules, including security aspects.

DG DEFIS will continue working on mapping the degree of implementation per Unit (to target awareness actions and inform internally about the latest corporate development). It will further focus on ensuring compliance with data protection rules in the area of procurement, grants and experts management.

⁽²⁶⁾ As part of EC Digital Strategy Action Plan on Reusable Solutions Platform.

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

Main outputs in 2022:

Output	Indicator	Target
Implementation of the corporate principles for data governance for DG DEFIS key data assets	Percentage of implementation of the corporate principles for data governance for [the service's] key data assets	Interim milestone by 2022: 50%
Deployment of new IT applications and update of existing application (listed in section H)	Number of new DEFIS IT application	3 new or update of existing applications
Increase staff awareness in DG DEFIS on personal data protection rules.	<ul style="list-style-type: none"> - Percentage management attending awareness raising activities. - Percentage of staff attending awareness raising activities. 	<ul style="list-style-type: none"> - Senior Management: 50% - Middle Management: 50% - Other Staff: 50%
Map degree of implementation of data protection procedures	<ul style="list-style-type: none"> - Number of records due. - Number of privacy statements due. - Percentage of Unit inventories 	<ul style="list-style-type: none"> - Percentage of records prepared. - Percentage of privacy statements prepared. - Number of Unit inventories prepared.
DEFIS IT systems complying with data protection rules.	Number of DEFIS IT systems.	Percentage of DEFIS IT systems complying with data protection rules.

I. Sound environmental management

At the time of writing of the DG DEFIS 2021 Management Plan, 2021 was still expected to be a normal year of operation following an anticipated end of COVID-19. However, the continuation of the crisis did not allow to establish a yearly baseline for normal offices occupation, use of paper and missions. It is therefore proposed for 2022 to establish a baseline for DG DEFIS during its first year of “normal” operation, for all these domains.

Regarding contractual activities, the following 2021 achievements are worth noting:

- signature of the financial framework partnership agreement with EUSPA and ESA with a specific chapter on environmental policy setting a continuous improvement standard for the implementation of the EU Space Programme;
- In the frame of Horizon Europe, introduced research and innovation activities aiming at the development of European GNSS and Copernicus applications fostering the European Green deal (for a total indicative budget of 14 M€).

To maximise the impact of space data, services and applications in support of the EU Green Deal, the use of environmentally-oriented actions supported by the EU Space Programme and Horizon Europe will continue to be encouraged.

In addition, implementation of the EC Guidelines for sustainable meetings and events, as well as implementation of the specific guidelines circulated in 2020 will continue to be promoted via internal communication channels. Corporate campaigns will be handled in close partnership with OIB and DG GROW, with which DG DEFIS shares its building.

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

Main outputs in 2022:

I. More efficient use of resources (energy, water, paper):

Output	Indicator	Target (2019 as baseline)
Paperless working methods at DG level (such as paperless working: e-signatories, financial circuits, collaborative working tools) and staff awareness actions to reduce office paper use in the framework of EMAS corporate campaigns and/or raise awareness about DG's office paper use in collaboration with OIB/OIL where appropriate.	Number of actions	1 action per year
	Number or % of staff informed/participated	Address all DG DEFIS staff
	% of Ares e-signed documents	establish a baseline for the year of operation
		Reduce paper consumption (%)

II. Reducing CO₂, equivalent CO₂ and other atmospheric emissions

Output	Indicator	Target (2019 as baseline)
Staff awareness actions on reducing GHG emissions (such as actions on sustainable commuting during EU Mobility week and VeloWalk corporate events) and/or raise staff awareness on sustainable commuting in collaboration with OIB or OIL (e.g. availability of bike parking facilities, lockers and showers, promote the reduction of parking spaces' use amongst staff).	Number or % of staff informed/participated	Address all DG staff
	% of staff participating in VeloWalk	increase of staff participating in VeloWalk
	% of sustainable commuters ⁽²⁷⁾ at DG/service	Increase % of sustainable commuters at DG/service (%) ⁽²⁸⁾
Gradual increased use (and number of) VC ⁽²⁹⁾ meeting rooms	Number of VC / hybrid meeting rooms	Number of VC /Hybrid meeting rooms

⁽²⁷⁾ Sustainable commuting usually refers to environmentally friendly travel modes, such as. Public transport (bus, tram, subway, light rail), walking, cycling, and carpooling.

⁽²⁸⁾ Only for Brussels: Based on the results of the staff mobility surveys conducted by OIB.

⁽²⁹⁾ VC (Videoconferencing) room

Output	Indicator	Target (2019 as baseline)
for meetings with stakeholders (avoiding business trips) in the DG, in collaboration with DG SCIC, OIB and OIL.		
Analysis of DG's missions trends /patterns (based on corporate EC-staff's professional trips (missions) ⁽³⁰⁾), optimise and gradually reduce CO ₂ emissions (e.g. by optimising the number of participants in the same mission, promoting more sustainable travelling options, promoting videoconferencing/ virtual events as an alternative).	Number of missions	Number of missions
	CO ₂ (t) emissions from DG's missions <i>(% means of transportation used)</i>	Establish a baseline for the first "normal" year of operation Reduce DG's CO ₂ emissions from missions ⁽³¹⁾ (%) in comparison with 2019 data (while in DG GROW)
Staff awareness on digital pollution and gradual change of behaviours avoiding heavy emails, encouraging the use of ICT platforms, avoiding unnecessary storage of data.	Number or % of staff informed/participated	Address all DG staff

III. Reducing and management of waste

Output	Indicator	Target (2019 as baseline)
Implementation of the EC Guidelines for sustainable meetings and events , e.g. reduce/eliminate single-use plastics, gadgets/gifts.	Number of green events	At least 1 event

IV. Promoting green public procurement (GPP)

Output	Indicator	Target (2019 as baseline)
Encourage actions underpinning the use of space data, services and applications in support of the EU Green Deal.	Number of calls	Equal or above 2021 results
	Number of projects funded	Equal or above 2021 results
	Overall amount in EUR	Equal or above 2021 results

⁽³⁰⁾ data provided by HR.D.02

⁽³¹⁾ Based on data provided by the Commission's carbon footprint analysis (by HR.D.02), including business travel.

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

In order to reduce environmental impact and following the efforts made in previous years, digital solutions are strongly encouraged in DG DEFIS whenever possible and appropriate. In close cooperation with DIGIT, investments in modern and secured equipment, allowing for holding professional videoconferencing instead of traveling worldwide intensively for negotiations. Here are some concrete examples of actions:

- Reduction of the number of missions together with a limited number of staff per mission;
- Considerable reduction on mission budgets and reduction of carbon foot print of the DG;
- Substitute traditional promotional materials with sustainable promotional materials.

Moreover, DG DEFIS is constantly revising its working processes and will improve them if possible.

K. Security and Information

Under the framework of the European Defence Fund Regulation, the EU Space Regulation and the Foreign Direct Investment (FDI) Screening Regulation, DG DEFIS handles sensitive and classified information (EUCI). DG DEFIS is a prime target for those actors that seek to gather sensitive information because it manages a significant volume of sensitive and classified information and due to the strategic dimension of the policies and programmes covered by its mission. DG DEFIS information security strategy in 2020 identified five objectives:

1. active contributor to the reinforcement of the Commission security;
2. internal security organisation of DG DEFIS;
3. security awareness of DG DEFIS staff;
4. secure DG DEFIS sensitive non-classified or classified RESTREINT UE/EU RESTRICTED;
5. secure DG DEFIS information that is classified CONFIDENTIEL UE/EU CONFIDENTIAL and SECRET UE/EU SECRET.

2022 will be a transitional year as the Commission will implement a new information security Regulation and deploy new IT systems for handling SUE³², RUE³³ and SNC information³⁴. With a view to provide precise and tailored guidance, the internal guide for the handling of SNC and REU information will be reviewed.

⁽³²⁾ SUE : new IT system for the handling and the registration of CUE and SUE documents

⁽³³⁾ R-TOP : laptop enabling the handling of RUE information and supporting RUE VTC

⁽³⁴⁾ M365 will be deployed in 2022. It is a cloud-based solution enabling the handling of SNC in cloud and the exchange of SNC information via TEAMS (including SNC VTC)

Moreover, awareness and training have a crucial role in building a security mind-set. Senior management will be provided with monthly reports on the security status in the DG.

In 2022, all staff in DG DEFIS will have to be in possession of a valid security clearance or have started the process to obtain it.

Following 2021 office moves, the securisation of new offices will be completed in order to achieve a comprehensive control of personnel allowed to enter DEFIS office space with particular regards the achievement of “closed door policy”.

Objective: DG DEFIS is ensuring a high level of protection of the sensitive and classified information it manages

Main results and outputs in 2022:

Output	Indicator	Target
Update of the internal guide for the handling of SNC and RUE information	Publication of internal guide on DEFIS intracomm	<ul style="list-style-type: none"> - Mid-2022 - All DEFIS staff
Organise security trainings	<ul style="list-style-type: none"> - Percentage of management attending awareness raising activities. - Percentage of staff attending awareness raising activities. 	<ul style="list-style-type: none"> - Management: 40%. - Staff: 80% - Tailored internal training sessions: 2 in 2022
Staff security clearance	<ul style="list-style-type: none"> - Percentage of staff with personal security clearance or in the process of being security cleared 	<ul style="list-style-type: none"> - all DEFIS staff: 95 %
Internal security reports	<ul style="list-style-type: none"> - Circulation of monthly reports 	<ul style="list-style-type: none"> - Management staff - 8 reports
Installation of electronic door handles in all directorate office spaces	<ul style="list-style-type: none"> - Percentage of equipped doors 	<ul style="list-style-type: none"> - 90 %

ANNEX 1 – Illustration of DG DEFIS Intervention logic, as outlined in the DG DEFIS Strategic plan for 2020 -2024

