



European Union Agency for the Space Programme

Single Programming Document

Years 2022 – 2024

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Foreword

In the 2022-2024 period, the European Union Agency for the Space Programme (EUSPA) takes on further tasks and responsibilities. Under the new Space Programme Regulation, EUSPA's mandate includes increased responsibilities in managing the exploitation of Galileo and EGNOS, including their service provision and operational security. Furthermore, the Agency's remit includes the procurement and the operation of the GOVSATCOM ground infrastructure (Hubs), the coordination of the user-related aspects of GOVSATCOM, in close collaboration with the Member States and other involved entities. EUSPA is responsible for the security accreditation of all the components of the EU Space Programme, through the Security Accreditation Board, composed of all Member States of the European Union. The Agency continues to be in charge for the communication, promotion and development of downstream markets and fostering of innovation based on Galileo, EGNOS, and now also for the commercial users of Copernicus. EUSPA will enhance synergies between the different components and leverage funding mechanisms such as Fundamental Elements and Horizon Europe. The European Commission may also decide to entrust the Agency with other tasks in the future.

EUSPA's teams of committed professionals spread across various sites in Europe, from the EUSPA Headquarters in the Czech Republic, Galileo Security Monitoring Centre sites in France and in Spain to the Galileo Reference Centre in the Netherlands, the European GNSS Service Centre in Spain, and EUSPA staff in the Toulouse Office, the Joint Office, and in the Integrated Teams, will continue to ensure high quality, robust and reliable service provision. In addition, they will be backed up by the industrial teams managed by EUSPA, for example in the Galileo Control Centres in Germany and Italy, in the EGNOS Control Centres, and ground facilities around the world.

While EUSPA's mission has expanded, the core aim remains the same – to link EU investment in space to the needs of citizens and governments in the European Union and users around the world.

The EU Space Programme offers new opportunities to EU space ambitions, and to EUSPA. By fostering synergies between navigation, Earth observation and secure telecommunications, the Agency will enable the delivery of the space-based services and applications that Europe needs to face the challenges of the future.

The evolution of EUSPA also opens up the possibility for a renewed cooperation with our partners at the European Commission, in the European Space Agency and with the Copernicus Entrusted Entities. This will ensure that the Space Programme is fully aligned with the EU priorities and supports the achievement of key EU policy goals – from the European Green Deal to the digitalisation of the European economy and the promotion of a stronger Europe in the world.

With the EU Space Programme Regulation now in force, EUSPA as a whole will continue to grow and mature as a European centre of excellence for the end-to-end exploitation of Galileo and EGNOS, and also for its new activities in Copernicus, GOVSATCOM, and SSA. The Agency will continue to deliver high quality space-based services for European Satellite navigation, such as the Galileo Open Service and the Public Regulated Service, while also preparing authentication features (OS-NMA), and the High Accuracy Service. During this period, the resourcing of the Agency will grow progressively and will be kept in close balance with the tasking of the Agency, in line with the approach set in the Regulation.

At EUSPA, we are committed to deliver what the EU Space Programme expects from us, and to make the EU Space ambitions a reality.

List of Acronyms

Acronym	Definition
AACC	Authority authorised to conclude contracts of employment
AB	Administrative Board
ABAC	Accrual Based Accounting
AD	Administrator
ANSP	Air Navigation Service Providers
ARAIM	Advanced Receiver Autonomous Integrity Monitoring
ARB	Anomaly Review Board
ASPR	Automatic Satellite Position Reporting
AST	Assistant
BCP	Business Continuity Plan
CA	Contract Agent
CAAR	Consolidated Annual Activity Report
CAS	Commercial Authentication Service
CBA	Cost/Benefit Analysis
CCB	Configuration Control Board
CDA	Crypto Distribution Authority
CDR	Critical Design Review
CEOS	Conditions of Employment of Other Servants (of the EU)
CI	Continuous Integration
CIS	Communication Information System
CMDB	Configuration Management Database
CMS	Common Minimum Standards
CNS	Communications, Navigation and Surveillance
COMSEC	Communications Security
CPA	Competent PRS Authority
CS	Commercial Service
CZK	Czech Koruna
DA	Distribution Authority
DFMC	Dual-Frequency Multi-Constellation
DG-DEFIS	Directorate General for Defence and Space
DIAS	Data and Information Access Services
DM	Documents Management
DMS	Documents Management System
DRB -EA	Design Review Board Early Access
EASA	European Union Aviation Safety Agency
EBCGA	European Border and Coast Guard Agency (commonly known as FRONTEX)
EC	European Commission
ECA	European Court of Auditors
ED	Executive Director
EDAS	EGNOS Data Access Service
EEAS	European External Action Service
EFCA	European Fisheries Control Agency

Acronym	Definition
EFTA	European Free Trade Agreement
EGNOS	European Geostationary Navigation Overlay System
EGNSS	European GNSS
ELT-DT	Emergency Locator Transmitter – Distress Tracking
EMC	Enhanced Minimum Configuration
EMSA	European Maritime Safety Agency
EOS	EGNOS Open Service
EP	European Parliament
ERTMS	European Railway Traffic Management System
ES	Emergency Service
ESA	European Space Agency
ESMC	EGNOS V3 Security Monitoring
ESP	EGNOS Service Provision
ESR	EGNOS System Release
EU	European Union
EUAN	EU Agencies Network
EUCI	EU Classified Information
EUSPA	European Agency for the Space Programme
FE	Fundamental Elements
FFPA	Financial Framework Partnership Agreement
FKC	Flight Key Cell
FOC	Full Operational Capability
EBCGA	European Border and Coast Guard Agency (commonly known as FRONTEX)
FTE	Full-time equivalent
GAL	Galileo
GCC	Galileo Control Centre
GDDN	Galileo Data Dissemination Network
GEO	Geostationary satellites
GNSS	Global Navigation Satellite Systems
GOVSATCOM	Governmental Satellite Communications
GPS	Global Positioning System
GRC	Galileo Research Centre
GRON	Galileo Robust Operational Network
GSA	European GNSS Agency
GSC	GNSS Service Centre
GSF	Galileo Secure Facility
GSMC	Galileo Security Monitoring Centre
GSMC-ES	Galileo Security Monitoring Centre - Spain
GSMC-FR	Galileo Security Monitoring Centre - France
GSOP	Galileo Service Operator
GSS	Galileo Sensor Station
HAS	High Accuracy Service
HQ	Headquarters
HR	Human Resources
HVAC	Heating, Ventilation, and Air Conditioning

Acronym	Definition
IAC	Internal Audit Capability
IALA	International Association of Lighthouse Authorities
IAOA	Information Assurance Operational Authority
IAS	Internal Audit Service
IATO	Initial Authorisation to Operate
ICC	Internal Control Coordinator
ICT	Information and Communications Technology
ILS	Integrated Logistics Support
IMS	Integrated Management System
INFOSEC	Information Security
IoT	Internet of Things
IRC	Incident Response Coordination
ISO	International Standards Organisation
IT	Information Technology
ITS	Intelligent Transport System
JRC	Joint Research Centre
KMOP	Key Management Operational Procedure
KMP	Key Management Plan
LBS	Location Based Service
LEG	Legal Department
LEOP	Launch and Early Orbit Phase
LISO	Local Informatics Security Officer
LPV	Localiser Performance with Vertical guidance
LSAA	Local Security Accreditation Authority
MEOSAR	Medium Earth Orbiting Search and Rescue
MFF	Multiannual Financial Framework
MGT	Management
MKD	Market Development
MOOC	Massive Open Online Courses
MSD	Master Schedule Document
NCR	Non-Conformity Report
NRB	Non-Conformance Review Board
OPS	Operations
OS	Open Service
OS-NMA	Open Service - Navigation Message Authentication
OSRD	Operations Support Requirements Document
OSRR	Operational Service Readiness Review
OVR	Operation Validation Review
PA	Product Assurance
PI	Performance Indicator
PIMP	PRS Information Management Plan
PKI	Public Key Infrastructure
PMP	PRS Management Plan
PNT	Positioning, Navigation and Timing
POC-P	Point of Contact Platform

Acronym	Definition
PPP	Precise Point Positioning
PRS	Public Regulated Service
QA	Quality Assurance
QIR	Quarterly Implementation Report
QM	Quality Management
QPM	Quarterly Progress Meeting
RAMS	Reliability, Availability, Maintainability and Safety
RBA	Remote Beacon Activation
RLS	Return Link Service
RM	Records Management
RMS	Records Management System
RTK	Real-Time Kinematic
SAA	Security Accreditation Authority
SAB	Security Accreditation Board
SAMS	Security Accreditation Milestones and Schedule
SAP	Security Accreditation Panel
SAR	Search and Rescue
SAS	Signal Authentication Service
SBAS	Satellite-based Augmentation System
SDD	Service Definition Document
SDM	SESAR Deployment Manager
SEC	Security
SECMON	Security Monitoring Infrastructure
SECOPS	Security Operations
SEP	Service Evolution Plan
SER	Service Exploitation Review
SESAR JU	Single European Sky ATM Research Joint Undertaking
SIAP	Strategic Internal Audit Plan
SINA	Static Integrated Network Access
SLA	Service Level Agreement
SLT	Service Level Target
SM	Social Media
SME	Small and Medium Enterprises
SMP	Symmetric Multi-Programming
SNE	Seconded National Expert
SOIF	Security Operational and Intelligence Facility
SOP	Standard Operating Procedures
SPD	Single Programming Document
SPIDER	Space Programme Infrastructure for Delivery of Encrypted Restricted
SPMR	Service Performance Management Report
SSA	Space Situational Awareness
SSRS	System-specific Security Requirements Statement
TA	Temporary Agent
TBC	To Be Confirmed
TBD	To Be Determined

Acronym	Definition
TF	Task Force
TS	Timing Service
TTC	Telemetry, Tracking and Commanding
TTFF	Time to First Fix
TWAN	Transport Wide Area Network
UCG	User Consultation Group
UCP	User Consultation Platform
UE	European Union
UK	United Kingdom
UTM	Universal Transverse Mercator
VDES	VHF Data Exchange System
VPN	Virtual Private Network
WA	Working Arrangement
WBS	Work Breakdown Structure
WP	Work Package
YoY	Year on Year

Mission Statement of the Agency

With the EU Space Programme Regulation, the European Union introduced an integrated Space Programme to provide secure space-related data, information and services without interruption and to maximise the socio-economic benefits, in particular by fostering the development of an innovative and competitive European upstream and downstream sector.

The European Union Agency for the Space Programme's mission is to support the European Union's objective of achieving a high rate of return on its investment in the EU Space Programme, in terms of services provided and subsequent benefits to users, economic growth and competitiveness, by:

- Designing and enabling services that fully respond to user needs, while continuously improving the European GNSS services and infrastructure;
- Managing the provision of quality European GNSS services that ensure user satisfaction in the most cost-efficient manner, and ensuring that their operations are thoroughly secure, safe and accessible;
- Engaging market stakeholders to develop innovative and effective applications, value-added services and user technology that promote the achievement of full European GNSS adoption and the use of information and services provided by the European Earth-Observation programme Copernicus, while fostering the competitiveness of EU Space Downstream industry, SMEs and Start-ups;
- Overarching coordination of user-related aspects of GOVSATCOM, in close collaboration with Member States, other entities, relevant Union agencies and EEAS;
- Furthermore, the Agency can play an important role in favouring synergies between the Union and all relevant actors, including Member States, in relation to Space Situational Awareness.

The provision of long-term, state-of-the-art and secure positioning, navigation and timing services whilst ensuring security, continuity, safety and robustness will be at the centre of the Agency objectives in relation to European GNSS. Satellite navigation has, indeed, made major in-roads in many areas of life, impacting business, public services and consumer behaviour in increasingly profound ways. Along with delivering economic benefits to innovative service providers and related businesses,

satellite navigation devices, now integrated within a wide variety of vehicles and transport systems, have fundamentally changed how we manage the mobility, safety and security of people and goods.

As part of its enhanced mandate, the Agency is expected to have the mission to increase the use of data, information and services offered by Copernicus, by undertaking communication, promotion and market development activities. In relation to GOVSATCOM and SSA, the Agency has a mission to facilitate coordination and synergies with all relevant actors and to undertake activities related to user uptake of data, information and services.

Mission Statement for the Security Accreditation Board

The Security Accreditation Board (SAB), established within the Agency, is the Security Accreditation Authority for all the components of the Programme. It is established within the Agency as an autonomous body and makes its decisions independently and objectively. The security accreditation activities and decisions are undertaken in a context of collective responsibility for the security of the Union and of the Member States. The Security Accreditation Board shall perform its tasks without prejudice to the responsibilities of the Commission or those entrusted to the Agency's other bodies, in particular for matters relating to security, and without prejudice to the competences of the Member States as regards security accreditation.

Security accreditation decisions adopted by the SAB entail inter alia the following:

- Approval of satellite launches;
- Authorisation to operate the systems set up under the components of the Programme or the elements of these components in their different configurations and for the various services they provide, up to and including the signal in space;
- Authorisation to operate the ground stations;
- As regards to the networks and the equipment connected to the Galileo PRS service or to any other secure service stemming from the components of the Programme, authorisation of bodies to develop and manufacture sensitive PRS technologies, PRS receivers or PRS security modules or any other technology or equipment which has to be checked under the general security requirements referred to in Article 34(2), taking into account the advice provided by national entities competent in security matters and the overall security risks.

The Agency provides the SAB and its subordinate bodies with all human and material resources required to perform their tasks independently. The Agency staff under SAB supervision, duly qualified, with an appropriate level of security clearance and acting objectively, perform independent security accreditation activities as defined in Chapter II of the Regulation. They ensure the administrative secretariat and provide independent professional expertise to the SAB, its subordinate bodies, and its

expert groups, in order to provide security assurance to support the SAB in making its security accreditation decisions.

The Security Accreditation Board and the Agency staff under its supervision perform their work in a manner ensuring autonomy and independence in relation to the other activities of the Agency, in particular operational activities associated with the exploitation of the systems.

Section I - General Context

I.01 Role of the European Union Agency for the Space Programme

The EU Space Programme Regulation assigns different tasks of the European Union Space Programme to EUSPA, either as core tasks or as tasks entrusted to it by the European Commission.

In relation to EGNSS, the Agency sees its activities expanded, under delegation, for the whole set of exploitation and service provision activities including the management, operation, maintenance, continuous improvement, evolution and protection of Galileo and EGNOS, for both space-based and ground-based infrastructure. Furthermore, through sub-delegation to ESA, the Agency manages the development of future generations of the systems. Also as a core task, the Agency is responsible for the operational security of Galileo and EGNOS, and their security monitoring through the GSMC, and for the communication, market development and promotion activities of their services. Through the Security Accreditation Board, EUSPA continues to be responsible for the security accreditation of Galileo and EGNOS; in addition, the Security Accreditation Board (SAB) is now the Security Accreditation Authority for all the components of the Programme.

In relation to Copernicus, the new core task for the Agency is the communication, market development and promotion activities of its data, information and services, without prejudice to the activities performed by other entrusted entities and the European Commission. Regarding GOVSATCOM, EUSPA is entrusted, under delegation, with the coordination of user-related aspects, with the procurement and the operation of the ground infrastructure (Hubs), with the support of the Commission in the definition of Implementing Acts and security aspects of the component, and with the performance of activities related to user uptake of data, information and services. The EU Space Programme Regulation also allows that further tasks are entrusted to the Agency, for example several tasks related to SSA: the contact with users on the quality of services, the development of the helpdesk for users and the launch of information and communication campaigns.

As core tasks, EUSPA is responsible for the following operational areas:

- **Security accreditation:** Security accreditation activities continue to be managed by the SAB, an independent body within the Agency. The SAB serves as the security accreditation authority for all the components of the Programme: Galileo, EGNOS, Copernicus, GOVSATCOM and SSA.
- **Operational security for EGNSS:** As the entity responsible for the exploitation of Galileo and EGNOS, the Agency is tasked to ensure the operational security of the systems and, to that end, carries out risk and threat analysis, by identifying and analysing related security risks and identifying possible treatment plans to mitigate such risks. EUSPA is also tasked with other necessary security activities, in particular setting of technical specifications and operational procedures.
- **Operation of the Galileo Security Monitoring Centre:** EUSPA continues to deliver services related to Galileo security monitoring, PRS access, Council Decision 2021/698/CFSP and expertise from the Galileo Security Monitoring Centre (GSMC). Due to the strategic nature of Galileo, the EU legislative framework was established to address threats to the Galileo infrastructure and signals, as well as to provide protection against unauthorised use of its navigation signals. This enables the EU to maintain full control of the system and its operation. The GSMC also provides the operational interface between the Galileo Control Centres and the Member States' Competent PRS Authorities (CPAs), the European Council, and the High Representative for Foreign Affairs and Security Policy (acting under Council Decision 2021/698/CFSP). The missions of the GSMC may be extended to support as well the other components of the EU Space Programme if so decided.
- **Public Regulated Service (PRS) tasks:** The Agency carries out Galileo PRS activities entrusted to it by PRS Decision 1104/2011/EU and the EU Space Programme Regulation. The main core tasks related to PRS continue to be the implementation of the Arrangement between the European Commission and the Agency pursuant to Art.14(c) of Decision 1104/2011 and, whenever requested pursuant to Decision 1104/2011/EU, the designation as competent PRS authority for EU Institutions and Agencies, International Organisations as well as the provision of technical assistance to Competent PRS Authorities (CPAs).

- **Communication, Promotion and Market Development:** EUSPA undertakes communication, promotion and market development activities of the services offered by Galileo and EGNOS and of data, information and services offered by Copernicus, by establishing and maintaining contact with civilian, professional, institutional and governmental users, collecting information on user needs, analysing market trends, developing the downstream market, and fostering the service uptake by the user community. For what concern Copernicus, the Agency cooperates closely with the other Entrusted Entities to ensure that there is no overlap with their communication activities. Furthermore, the Agency focuses on Copernicus Other Users as defined in the Regulation 2021/696, for example commercial and private users and on the coordination with existing processes, structures and activities in place for the Copernicus user uptake, especially the User Forum, to avoid overlaps and to maximise complementarity and possible alignment. In addition to this, the Agency will ensure a close coordination of the communications efforts with the Commission. The Agency also complements the European Commission's initiatives for developing and adopting regulated applications. The Agency further promotes the development of innovative EGNSS and Copernicus solutions and execute a wide range of strategic communication campaigns and raising awareness, in order to answer the needs of end-users and to become the main reference all over the world. The Agency also provides expertise to the Commission for the preparation of the downstream space-related research priorities.

As delegated tasks, the Agency undertakes the following tasks:

- **EGNSS Exploitation Management:** Galileo is the EU's own GNSS, providing a highly accurate, guaranteed global timing and positioning service under civilian control. The Galileo Open Service (OS) is Galileo's flagship service, identified as the primary worldwide service provided to the global public. EUSPA not only leads the operations of the Galileo system and its evolutions but is also in charge of managing the development of future generations, through delegation to ESA. In addition to the Galileo Open Service, the Agency also delivers the Public Regulated Service (PRS), and will deliver the Galileo High Accuracy Service (HAS) and the Galileo Signal Authentication Service (SAS). Indeed, the Agency is responsible for the end-to-

end PRS service provision, including the distribution of crypto-keys by the GSMC and the development of key technologies for the end-user segment. The Agency is also tasked with the future delivery of the Galileo Emergency Service (ES) and the Timing Service (TS). Additionally, Galileo contributes to the search and rescue support service (SAR) of the COSPAS-SARSAT system, by detecting distress signals transmitted by beacons and relaying messages to them via a 'return link'.

The European Geostationary Navigation Overlay Service (EGNOS) is Europe's first GNSS success story. Fully in exploitation phase since 2009, EGNOS is delivering to European citizens a certified Safety-Of-Life (SoL) service since 2011 enabling safety-critical GNSS applications across numerous sectors and in particular for Aviation. It accomplishes this by providing overlaying signals and data augmenting currently the GPS signals, and tomorrow the GPS and Galileo signals with the new EGNOS system generation (EGNOS V3). The Agency has been in charge of managing the EGNOS exploitation programme since 2014 and this continues with EUSPA, which will lead the transition to the next generation of the EGNOS infrastructure augmenting Galileo, with the support of ESA for its system development. The Agency will also develop evolutions of the two other EGNOS services (EOS – EGNOS Open Service- and EDAS – EGNOS Data Access Service) in answer to user needs and to support new applications, managing the development through sub-delegation and is supporting the European Commission in the extension of EGNOS beyond the EU.

- **GOVSATCOM:** The Agency is tasked with the coordination of user-related aspects of GOVSATCOM in close collaboration with Member States, other entities, relevant Union agencies and EEAS, as well as parts of the implementation and the operation of GOVSATCOM such as the procurement of GOVSATCOM Hubs, the operation of the Hubs, the support of the Commission in the definition of Implementing Acts and security aspects of the GOVSATCOM component. Under the GOVSATCOM component of the Programme, satellite communication capacities are combined into a common Union pool of national and EU capacities, to offer services to all EU Member States.
- **Research and Development activities:** The Agency implements activities related to the development of downstream applications based on the components of the Programme

including Research and Development (R&D) activities, in the context of the Horizon Europe programme, Fundamental Elements and integrated applications based on the data and services provided by Galileo, EGNOS and Copernicus.

- **User Uptake activities:** The Agency is tasked to undertake activities related to the user uptake of data, information and services in relation to programme's components other than Galileo and EGNOS, such as Copernicus (for the aspects not already covered by the core tasks) GOVSATCOM and SSA.

I.02 Main Assumptions

The Agency drafted this programming document based on the following assumptions, which were correct as of time of writing:

- EUSPA drives Galileo towards full operational capabilities, with important milestones such as Open Service Full Operational Capability and Public Regulated Service Initial Operational Capability approaching. In addition, further services and capabilities of Galileo will continue being developed, such as the High Accuracy Service and the Open Service Navigation Message Authentication. Lastly, the Agency will continue preparing the Emergency Warning Service, Timing Service and future evolutions of SAR.
- EGNOS services will continue to be delivered according to the EGNOS Service Evolution Plan on the basis of the EGNOS V2 infrastructure, while in parallel, the EGNOS V3 system will be developed and deployed as per the current ESA contract with industry in view of its hand-over to the Next EGNOS Service Provider. The SAB Authorisation to Operate EGNOS V3 is expected to be achieved in the 2023-24 period.
- GSMC infrastructure will evolve with the new buildings in France and Spain. GSMC Master Site will benefit from the Extension (Building 132), ready for deployments of classified equipment by September 2022. At GSMC-ES, the Final Configuration GSMC-ES site accreditation (after building

works are completed) is expected in November 2021, ready for deployments of classified equipment.

- The deployment of the new GSF version at GSMC has increased the PRS functionalities. The security monitoring and the Cyber Security activities will improve with the deployment of the SOIF equipment and later on with the SECMON system infrastructure (2023) enabling the centralisation of the Galileo security core services at the EUSPA level.
- The Agency's establishment plan has been reinforced by 101 temporary agents (TA) posts for the tasks as defined in the Space Programme Regulation. The ramp-up is planned as follows: 41 TA posts in 2021, 40 in 2022 and 20 posts in 2023. In parallel, the Agency has agreed with the Commission a plan for a gradual and progressive (2021 – 2027) reduction of contract agents (CA) numbers to achieve the number foreseen in the legislative financial statement paying attention to the continuity of operations and the necessity to perform specific tasks by staff only.
- It is noted that, while noting that the EUSPA stands ready to work with the Commission on further activities, the resources associated to tasks will need to be provided to the Agency and cannot be estimated for the moment, since the need is not yet known.

Section II - Multi-annual Programming 2022-2024

II.01. Multi-annual Objectives

The medium-term strategic objectives of the Agency are based on the definition of tasks assigned to it per Article 29 of the EU Space Programme Regulation.

	Strategic objective	How it is implemented
29.1 (a)	Ensuring the security accreditation for Galileo, EGNOS, Copernicus, GOVSATCOM and SSA (core task)	The Agency will monitor the implementation of security procedures and will perform system security assessments, audits, tests and inspections.
29.1 (b)	Ensuring the operational security of Galileo and EGNOS (core task)	The Agency will adhere to the standards and requirements referred to Title V (Security of the programme) of the new regulation
29.1 (b)	Ensuring the operation of the Galileo Security Monitoring Centre (core task)	The Agency will adhere to Regulation No 2021/696 and Decision No 1104/2011/EU for the GSMC operations, and to instructions pursuant to Council Decision 2021/698/CFSP.
29.1 (b)	Performing the tasks related to the Public Regulated Service (PRS) of Galileo (core task)	The Agency will comply with provisions of Article 5 of Decision No 1104/2011/EU, in particular to support the European Commission as described in Article 8(6). The Agency will also comply with the provision of the arrangement concluded between the European Commission and the Agency pursuant to Article 14(c) of the Decision.

	Strategic objective	How it is implemented
29.1 (c, d)	Ensuring the promotion, market development and communication of the services of Galileo, EGNOS and Copernicus (core task)	<p>The Agency will:</p> <ul style="list-style-type: none"> • Provide an annual market report on applications and services and a user technology report on the state of GNSS receiver technologies, extending it to Copernicus and, in a second step, to GOVSATCOM. • Establish close contacts with users and potential users of the systems, with a view to collecting information on their needs. • Follow developments in satellite navigation downstream markets and assess the potential new use of Copernicus in emerging downstream markets/ecosystems, aiming at supporting European downstream industry, SMEs and start-ups competitiveness leveraging the CASSINI Space Entrepreneurship initiative. • Draw up an action plan for the uptake of services by the user community, in particular, comprising of relevant actions relating to standardisation and certification. • Establish a common communications plan with the different partners of the components of the EUSP
29.2 (a)	Ensuring the delivery of the services of Galileo and EGNOS (delegated task)	<p>The Agency will:</p> <ul style="list-style-type: none"> • Monitor the services delivery ensuring compliance as per published Service Definition Documents (SDD) • Deliver quality assistance to Users of the services through the distribution of relevant information, timely notification of events affecting service, and providing support as required • Ensure smooth transition when deploying new version of the ground segment or integrating new satellites into the constellation with no impact on the Users (in terms of services interruption or degradation) • Develop, implement and manage the incident detection and reaction chain of command from minor incidents to major crises.

	Strategic objective	How it is implemented
29.2 (b)	Ensuring the coordination of user-related aspects of GOVSATCOM (delegated task)	<p>The Agency will:</p> <ul style="list-style-type: none"> Based on the user-related aspects of GOVSATCOM, implemented in the scope of downstream activities, coordinate the service portfolio and the sharing and prioritisation of services. Procurement of the secure operational ground segment (GOVSATCOM Hubs). Support, upon request of the Commission, the definition of the business, technical, legal and financial aspects of Service Level Agreements (SLAs) with Member States and providers; and their implementation. Operate the GOVSATCOM Hubs Security tasks related to GOVSATCOM. Support the Commission to system and services evolution, including security aspects.
29.2 (c)	Implementing research and development (R&D) activities in the context of Horizon Europe and Fundamental Elements (delegated task)	<p>The Agency will:</p> <ul style="list-style-type: none"> Based on the R&D priorities assessed together with the Commission and all relevant stakeholder, define the plan for development of EU Space downstream applications, as contribution to the Horizon Europe Work Programme, and for the development and evolution of fundamental elements for EGNOS and Galileo Launch the first, second and third Horizon Europe 2021-2023 call and manage the related projects portfolio Launch the 2022 – 2023 Fundamental Elements calls and manage the related projects portfolio Support downstream SMEs and start-ups via different actions in the frame of the CASSINI Space Entrepreneurship initiative.
29.2 (d)	Undertaking User Uptake activities in relation to GOVSATCOM and SSA (delegated task)	<p>The Agency will:</p> <ul style="list-style-type: none"> Coordinate the network of users and analyse their needs and requirements with the aim to build the user perspective and assess the trends of the market demand Initiate the extension of the market report to GOVSATCOM. Ensure transfer of selected <u>SSI</u> activities (Front Desk) to EUSPA, if so decided by the European Commission.

Progress in achieving these strategic objectives is assessed through the overall performance of the contributing tasks. Such performances are defined in the multi-annual and annual programme below.

II.02. Multi-annual Programme

II.02.01 CORE TASKS

II.02.01.01 Security Accreditation

In accordance with the EU Space Programme Regulation, the Security Accreditation Board (SAB) prepared section II.02.01. It is incorporated into this programming document without any change.

The Security Accreditation Board (SAB) is established within the Agency and is the security accreditation authority for all the components of the Programme.

The SAB is already responsible for the security accreditation decisions related to the EU GNSS systems (Galileo and EGNOS). Starting from 2021, the SAB also becomes responsible for the security accreditation decisions of three additional components of the Programme (i.e. Copernicus, SSA and GOVSATCOM).

At the end of 2016, SAB issued the authorisation for the Programme to provide initial operation of the Galileo System and Services up to and including the Signal in Space. Since then the accreditation activities have continued focusing on the security of the Galileo services, coupled with its operation and infrastructure evolution. The security accreditation activities for Galileo continue in 2022-2024 and beyond, taking stock of existing processes, the evolution of the system and its services, and the continued evolution of security threats.

The accreditation activities for EGNOS has intensified substantially starting from 2019, progressively focusing on the definition of the accreditation methodology in particular for site accreditation, as well as reviewing security design and cyber robustness. Particular attention is put in the understanding of

the implications on security of the unique challenges that EGNOS brings, such as safety certification requirements and compliance to applicable regulations. The security accreditation activities for EGNOS are expected to ramp up starting 2022.

The security accreditation activities for Copernicus, SSA and GOVSATCOM are introduced from 2021. These activities focus at the start on acquiring competence on the three new components and coming to contact with relevant stakeholders and security communities in order to identify their needs in terms of security accreditation. This leads to the definition of the relevant Security Accreditation Strategy and liaison with the stakeholders to plan the initiation of the accreditation activities and their progressive implementation. The security accreditation dossier built by the Programme is introduced the Board for assessment of the security risks, leading towards the accreditation milestones of the three components.

The SAB will continue to focus on:

- Approval of satellite launches;
- Authorisation to operate the systems set up under the components of the Programme or the elements of these components in their different configurations and for the various services they provide, up to and including the signal in space;
- The (re-)accreditation/(re-)authorisation (as applicable) of the ground stations;
- Maintaining a permanent, transparent and fully understandable monitoring process to ensure that the security risks for the components are known, that security measures are defined to reduce such risks to an acceptable level in view of the security needs of the Union and of its Member States and for the smooth running of the components, and that those security measures are applied in accordance with the concept of defence in depth;
- Monitoring the implementation of the cyber policy and cyber mitigation measures;
- Authorisation of bodies as per Regulation.

The Agency provides expertise and the administrative secretariat to the SAB and its subordinate bodies and group of experts, and contributes to the security assurance assessment needed for the SAB to make informed security accreditation decisions.

The Agency provides the SAB, its subordinate bodies and group of experts with all human and material resources required to perform their tasks independently. Such resources have to progressively adapt to the increased accreditation activities, in particular due to the new activities on the three additional components, as well as the increased complexity of accreditation activities linked with the system and service evolutions of Galileo and EGNOS.

II.02.01.01.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹
1	Approvals of satellite launches	The Agency shall perform security assurance activities, inform the SAB of the results and administer corresponding accreditation decisions for satellite launches.	<ul style="list-style-type: none"> • Accreditation statements for satellite launches issued. • Subordinate bodies' recommendations pertaining on their expertise provided on time for SAB decisions. • Decisions taken in accordance with the rules of procedure. 	2022 – 2024
2	Authorisations to operate the systems set up under the components of the Programme or the elements of these components in their different configurations and for the various services they provide, up to and including the signal in space	The Agency shall perform system, operations, and services security assurance activities, establish a monitoring process of the security risk assessment and related security measures, inform the SAB thereof and administer corresponding accreditation decisions	<ul style="list-style-type: none"> • Accreditation statement for all system configurations/services operated issued. • Subordinate bodies' draft documents/recommendations issued on time for SAB consultation/decision. • Decisions taken in accordance with the rules of procedure. • Coordination of security assessments and audits. 	2022 – 2024
3	Authorisations to operate ground sites	The Agency shall perform site security assurance activities including site visits, inform the SAB thereof and administer corresponding accreditation decisions	<ul style="list-style-type: none"> • Accreditation statement for each site issued, as needed. 	2022 – 2024

¹ The year indicates when the Agency expects to perform that action. These dates are correct as of the time of writing and are based on the current plans.

			<ul style="list-style-type: none"> • Subordinate bodies' draft documents/recommendations issued on time for SAB consultation/decision • Decisions taken in accordance with the rules of procedure. 	
4	Authorisation of bodies to develop or manufacture sensitive technology	The Agency shall administer security accreditation decisions on authorisation of bodies to develop or manufacture sensitive PRS technologies, PRS receivers or PRS security modules, or any other technology or equipment which has to be checked under the general security requirements referred to in Article 34(2), for PRS service in Galileo or any other secure service stemming from the components of the Programme.	<ul style="list-style-type: none"> • Authorisation statements issued for bodies involved. • Documents/recommendations issued on time for SAB consultation/decision. • Decisions taken in accordance with the rules of procedure. 	2022 – 2024
5	SAB Secretariat	The Agency shall ensure the SAB secretariat and general support to the SAB chairperson in discharging the related regulatory responsibilities	<ul style="list-style-type: none"> • Management of the SAB meetings in accordance to the applicable rules of procedures. • Preparation and maintenance of Security Accreditation Strategies. • All SAB decisions prepared and administered in compliance with the rules of procedure. 	2022 – 2024
6	SAB Subordinate Panel (and related groups of experts)	The Agency shall organize the special subordinate Panel acting on instruction of the SAB, comprised of Member State security experts in order to conduct security analysis reviews and tests and produce relevant risk reports and accreditation recommendations to the SAB to assist in its decision making. Expert groups may be set up and disbanded to contribute to the work of the Panel. The Agency provides chairmanship and independent technical expertise in support of the Panel and of the expert groups.	<ul style="list-style-type: none"> • Management of the Panel meetings and group of experts' meetings. • Report to the Panel from participation to Programme accreditation reviews. • Provide independent technical expertise in support to the Panel by preparing technical notes/presentations to the Panel on specific topics. • Subordinate body's recommendation provided to SAB for each decision. 	2022 – 2024

7	Assurance for Programme keys	The Agency shall organize a special subordinate body under the supervision of the SAB representing the Member States to provide assurance in particular on the management of programme flight keys. It shall also conduct verification, monitoring and assessment of the establishment and enforcement of procedures for accounting, secure handling, storage, distribution and disposal of the PRS keys of Galileo.	<ul style="list-style-type: none"> • Management of the related meetings. • Report to SAB providing assurance on the management of flight keys per each launch campaign • Report to SAB on verification, monitoring and assessment of the establishment and enforcement of PRS keys procedures within Galileo. 	2022 - 2024
8	SAB regulatory responsibilities on Copernicus, GOVSATCOM and SSA	The SAB shall progressively ramp up the accreditation activities for the three new components (Copernicus, GOVSATCOM, SSA), till their implementation under the tasks detailed in the previous objectives as relevant.	<ul style="list-style-type: none"> • Draft and management of relevant accreditation documents (e.g. Security Accreditation Strategy) • Maintenance of the plan for accreditation activities for the three components • Informative points relevant to the accreditation of the three components inserted in the SAB Agenda, with related preparation of slides/notes • First accreditation activities initiated, as requested 	2022 - 2024

II.02.01.02 Operational security of EGNSS components

The regulation for the European Space Programme states (Art. 29, 34) that the entity responsible for the management of a component of the Programme shall be responsible for the operational security of that component and shall, to that end, carry out risk and threat analysis and all the necessary activities to ensure and monitor the security of that component, in particular setting of technical specifications and operational procedures, and monitor their compliance with the general security requirements of that component. For Galileo and EGNOS that entity shall be the Agency, therefore objectives are set up in order to undertake the relevant activities for both systems².

It has to be noted that similar activities for the EU GNSS components have already been undertaken by the Agency in the previous MFF, although under delegation from the European Commission.

² The Agency notes the European Commission might entrust it with a similar role for other components of the Space Programme. The objectives related to those tasks would be considered as delegated from the European Commission and would not appear here.

II.02.01.02.01 Tasks until 2024

	Activity	Objective	Performance Indicator	Year ³
1	Threat and security risk assessment and analysis	Regular and robust risk assessments of activities to ensure they do not pose a risk to the security of the EU GNSS systems, Member States or the EU.	<ul style="list-style-type: none"> Regular updates of risk assessments or security plans as per programme needs. 	2022 – 2024
2	Operations security	Provision of security oversight of the programme operators.	<ul style="list-style-type: none"> Security sessions in the service exploitation reviews 	2022 – 2024

³ The year indicates when the Agency expects to perform the action. These dates are correct as of the time of writing and are based on current plans.

II.02.01.03 Operation of the Galileo Security Monitoring Centre

During the 2022-2024 period, the GSMC will continuously improve the implementation of its:

- **Galileo security and system status monitoring:** the GSMC processes system security raw events and security incidents from different stakeholders. By monitoring this information, the GSMC provides an overall view of Galileo's security status to the Member States, the Commission, the Council and the High Representative. The GSMC handles security incidents relating to Galileo operations and escalates those covered by Council Decision 2021/698/CFSP to the Council and the High Representative for information or action. The GSMC also coordinates responses to specific security incidents with the relevant Member States as part of the Incident Response Coordination (IRC) structure.
- **Management of PRS access:** the GSMC provides PRS Access management service to the PRS Participants in compliance with security requirements, agreements and regulatory framework set up by the European Commission. The GSMC manages the lifecycle of access to the PRS following stakeholder requests in order to assure the service continuity, including service outage notification and service support for incident resolution and anomaly investigation. It also ensures PRS Participants that sensitive information related to their use of Galileo is adequately managed and protected.
- **Implementation of Council Decision 2021/698/CFSP instructions:** the GSMC ensures the implementation of Council Decision 2021/698/CFSP instructions coming from the Council or the High Representative. The GSMC is the single-entry point at Agency's level for the implementation of these instructions.
- **PRS and Galileo security expertise and analysis:** as set out in Article 3(2) of Council Decision 2021/698/CFSP, the GSMC as part of the Agency will provide advice to the Council of the EU (when invited to do so under that decision) and technical expertise to the European Commission under the provisions of Regulation 2021/696. Also, in accordance with Article 5.9 of Decision 1104/2011/EU, the Agency may provide technical support to CPAs.

During the 2022-2024 period, the GSMC will operate with the complete hosting capabilities and upgraded systems:

- **The GSMC consists of one master site and one back-up site:** both sites are operational and further evolutions of the infrastructures are expected, including the transition to the GSMC-ES Final configuration (Building E6) and GSMC-FR Building extension (Building 132). The GSMC will be upgraded with new equipment to support new Galileo operational milestones and new operational security missions, with future system releases deployed in the new buildings.
- **The new Galileo Security Facility (GSF):** further evolutions of the GSF are foreseen, in line with the evolution of the Galileo ground segment, in order to centralise the PRS management capabilities within the Galileo system in the GSMC allowing full control of the execution of all PRS operations (including PRS key distribution) directly from the GSMC. This also reinforces the availability of GSMC operations and services in terms of robustness and continuity. The infrastructure enables a significant improvement of the service provision levels and also provides new PRS functionalities to support PRS IOC and PRS FOC milestones.
- **Security Operation Intelligence Facility (SOIF):** A set of tools for the detection of advanced cyber-threats are being deployed in 2021-2022.
- **Provision of the Operational interface:** The Agency will continue to deploy the Galileo Robust Operational Network (GRON) to CPAs and to upgrade its capabilities and the range of its services, allowing communication with CPA at SECRET UE/EU SECRET level.
- **Cyber Threat Intelligence:** intent to put in place a dedicated solution for threat data analysis in order to improve the quality of Galileo cyber preventive controls.

During the 2022-2024 period, the Agency will also support the definition, the development and the planning of the building upgrades and operations updates needed and will support the preparation, operation and supervision of Flight Key Cell in close coordination with the relevant departments of the Agency.

Between 2022 and 2024, the main challenges will be:

- With respect to the GSF, SOIF and SECMON equipment deployed by the Programme, the core challenges for the GSMC are:
 - To improve the PRS management service from the GSMC, using the GSF equipment, the GRON, and additional tools;

- To maintain 24/7 real time operations in parallel to performing the GSMC service validation campaign after the migration of the new system releases.
- To maintain the dual-site capability by successfully exercising business continuity plans in parallel to maintaining 24/7 real time operations. It should be noted that despite equipping the GSMC with dual site capability, the backup site remains unmanned at operational level, meaning that an aovid recovery of the operational capabilities to the backup site will not be possible. This deviation to the security service level targets, as defined in the Galileo Security baseline - SSRS V3.9, must be recovered to meet the upcoming programme milestones (OS FOC).
- To deploy new tools and develop expertise in the cyber threat domain.
- To continue enhancing its supporting organization, i.e. the maintenance and the IT OPS Sysadmin⁴ support, and support the new system deployments.
- To support the deployment of the GSF P3.0.2 and SECMON on both GSMC sites. This requires tight coordination and planning with the Programme. This deployment includes running the full operation engineering process until operators are trained and certified, and the required evidence is provided to SAB for security assurance.
- To ensure the strategy and standardisation of the operations are commensurate with the staffing plan, noting in particular the requirements from the application of the cyber security policy, and services to support to the significantly increased scope of systems to be technically supported.
- To start preparing for the evolutions of the buildings for hosting new missions and equipment.

II.02.01.03.01 Tasks until 2024

The Agency has organised the GSMC in accordance with the work breakdown structure, into six major work packages: Operations, Engineering, Hosting Services, Management, Administration and Security.

GSMC activities are handled in accordance with processes:

- **Management Processes** lead the organisation and provide strategic guidelines. Most of these processes directly interface with similar processes of the Agency.

⁴ IT OPS Sysadmin: administration of operational IT systems

- **Core Processes** represent the GSMC's core businesses and are based on its main missions of delivering services and operational readiness and service upgrades.
- **Support Processes** are designed to help maintaining and developing operational performances level of the GSMC's main activities. These processes mostly reflect the Agency's main administrative processes, considering the GSMC roles and responsibilities as an operational centre.

Each process is associated with a list of objectives linked to the GSMC's main operations activities. These in turn trigger the performance indicators listed below.

ID	Activity	Objective	Performance Indicator	Year ⁵
M1	Management of the organisation and communication (Management Process)	Define the GSMC Operations strategy and objectives.	Annual objectives and strategy in place.	2022 - 2024
		Prepare and implement the GSMC's operations by scheduling milestones and main activities.	Monthly update of the GSMC Master Schedule, Quarterly release of the GSMC master schedule document (MSD) and monthly provision of the GSMC Service roadmap	
		Report to programme stakeholders on the GSMC operations activities.	Monthly reports provided by the 15 th of the following month. Contribution to Service Exploitation Review (twice a year).	
		Provide an overview on the GSMC internal communication (top-down and bottom-up approaches) and team organisation.	Weekly GSMC reports provided.	
		Ensure the development and implementation of project management processes, methodologies, tools, and reporting.	Monthly dashboard on GSMC's entire projects portfolio.	

⁵ The year indicates when the Agency expects to perform listed action. These dates are correct as of the time of writing and are based on the current plans.

ID	Activity	Objective	Performance Indicator	Year ⁵
M2	Integrated Management System (Management Process)	Guarantee maintenance of the Agency's ISO 9001 certification, including adaptation to ISO 9001 evolutions.	Quarterly (or as required) update of the GSMC's contribution to the Agency's IMS. Annual contribution to quality audits. Annual (or as required) update of the process map and Work breakdown structure. Quarterly (or as required) update of the GSMC continuous improvement actions plan. Annual contribution to ISO 9001 certificate renewal and maintenance.	2022 -
		Ensure Product Assurance (PA) and Quality Assurance (QA).	GSMC processes are monitored from a QA perspective, while the outputs are checked by PA All documents produced for GSMC operations activities are quality-checked.	2024
M3	Risk and business continuity management (Management Process)	Identify and manage risks that could impact the Galileo operations and the Programme.	GSMC operations activities risks are updated each month. GSMC participates in the Agency's Risk Management Board and escalate risks as necessary.	2022 -
		Ensure the maintenance and readiness of a Business Continuity Plan.	The GSMC business continuity and disaster recovery plan is validated and kept up-to-date. All new GSMC service configurations are supported with a business continuity and disaster recovery plan updated on a yearly basis. A business continuity exercise is run each year	2024
M4	Health & Safety management (Management Process)	Maintain the responsibilities for health and safety at work and maintain a safe environment on both GSMC sites in line with Agency policy.	Annual review of the Agency's policy, update of applicable legal requirements at GSMC sites. Briefings and exercise drills on Health and Safety.	2022 - 2024

ID	Activity	Objective	Performance Indicator	Year ⁵
M5	Resolution and continuous improvement management (Management Process)	Ensure that problems and improvements are identified, recorded and handled.	ARBs ⁶ are organised, recurrence of which can be increased as required.	2022
			The root-causes of problems are investigated	-
			The lessons learnt are captured and processed.	2024
C1	Engineering and requirement management (Support Process)	Identify, analyse and implement the requirements applicable to the GSMC and track evolutions of the applicable baseline.	Requirements applicable to GSMC are managed through DOORS (Rational Dynamic Object-Oriented Requirements System).	2022
		Ensure and report on the GSMC's compliance with programme requirements.	Statement of compliance and justification files are released to the programme as requested.	-
		Design, validate and deploy Standard Operating Procedures (SOP) and Operational tools in support to the operations.	The baseline applicable to GSMC services and operations is identified and updated. Execution of the operations engineering process for all new GSMC service releases.	2024

⁶ Anomaly Review Board

⁷ Configuration Control Board

ID	Activity	Objective	Performance Indicator	Year ⁵
		Define processes, tools and plans for system development activities, including maintenance for the two sites.	Manage new building evolution requirements and change requirements for existing buildings. Contribute to FR/ES infrastructure delivery reviews.	
		Ensure the security accreditation of sites and IT systems	Design of the security framework, preparation of the security accreditation documents for the new sites/systems and maintenance of the security accreditation for the existing systems. Implementation of Security Operations (SECOPs) for Communication Information System (CIS) monitored and systems audited.	
C2	Operations, expertise and analysis (Core Process)	Ensure the security accreditation of sites, Services and IT systems	Design of the security framework, preparation of the security accreditation documents for the new sites/systems and maintenance of the security accreditation for the existing systems. Critical National Infrastructures obligations are fulfilled Implementation of Security Operations (SECOPs) for Communication Information System (CIS) monitored and systems audited.	2022 - 2024

ID	Activity	Objective	Performance Indicator	Year ⁵
		Provision of expertise on PRS and Galileo security	<p>Participation and contribution to the relevant European Commission- led working groups on PRS and Security is performed.</p> <p>Support for the provision of PRS training and workshops for Member states for new System releases is provided.</p> <p>Support the consolidation of PRS and SECMON operational baseline, and the definition of GSMC operational and service evolutions (including contribution to continuous improvement of operations).</p> <p>Management GSMC service transitions for new service releases.</p> <p>Provide expertise and lessons learnt gained on PRS and Galileo to the other components of the EU Space programme.</p>	
		Enable PRS access to authorised stakeholders, in compliance with PRS access rules.	PRS access management services as defined in the PRS SDD classified Annex are managed and provided in compliance with the GSMC SLA (PRS SDD Classified annexes). Regular reporting for the Programme PRS Service Exploitation Review (SER) is provided.	
		Maintain the GSMC IT Operational Systems required to meet the GSMC's core missions in both GSMC sites (master and backup).	<p>Systems status and availability monitored, including backup and restore.</p> <p>Ensure Level 1 preventive and corrective maintenance.</p> <p>Contribute to the management of Level 2 and Level 3 maintenance activities</p> <p>Support to Licensing, and Manage Assets.</p>	

ID	Activity	Objective	Performance Indicator	Year ⁵
C3	Crisis management (Core Process)	Be ready for specific operations in case of a crisis affecting the Galileo system, including supporting the Council decision (joint action) process.	Support provided to resolve crisis affecting the EU or the Galileo system. Internal procedures are established and implemented in case the European External Action Service (EEAS) triggers Council decision instructions for Galileo. Ensure the readiness of GSMC for crisis response, in term of training, expertise, operational procedures, interfaces, and supporting tools.	2022 - 2024
S2	Local security (Support Process)	Prepare for, ensure, and maintain local security operational support to protect EU classified information present on GSMC sites and its assets.	<ul style="list-style-type: none"> • COMSEC management: Provision of COMSEC programme within GSMC, in accordance with Galileo Programme Security instructions. • Crypto account operations and management: <ul style="list-style-type: none"> ○ Ensure reception, preparation and shipment of crypto items to/from crypto accounts and users. ○ Renewal of keys supporting operational systems. • Local security operations: physical security, management of guarding support, coordination with national and local authorities, and auditing activities. Briefings on security awareness. • Registry control management: management of classified document registry and operators RCO certification trainings. 	2022 - 2024
S3	Hosting management (Support Process)	Provide facilities services to support GSMC operations	<p>GSMC Master site in France:</p> <ul style="list-style-type: none"> • Establish and manage facilities management service contract Framework • Handle the upgrade of building supporting classified activities • Establish the extension (construction and maintenance by FR-Ministry of Defence) and contribute to related agreement amendments. <p>GSMC Backup site in Spain:</p> <ul style="list-style-type: none"> • Establish and manage maintenance in Spain • Manage the upgrade of building facilities. 	2022 - 2024
		Implement, ensure, and maintain Configuration Management	Implementation and maintain up-to-date the Configuration Management Database (CMDB), including licences and hardware assets.	

II.02.01.04 Public Regulated Service

The Agency will continue to carry out PRS activities entrusted to it by the PRS Decision 1104/2011/EU and through the EU Space Programme Regulation 2021/696 establishing the Space Programme of the Union and the European Union Agency for the Space Programme.

Decision No 1104/2011/EU allows for certain tasks to potentially be entrusted to the Agency, including:

- Designation as a Competent PRS Authority for the Council, the European Commission and the EEAS (Article 5(1)-b).
- Designation as a Competent PRS Authority for EU Agencies and international organisations (Article 5(1)-c).
- Being requested to provide CPAs with the technical assistance needed to perform the task entrusted to it (Article 5(9)).

Although at the time of writing the Agency has not yet been asked to be designated as a CPA for other entities, it must be prepared to perform such tasks (i.e., organisation and tools) as more requests from the European Commission, Member States, EU Agencies, and international organisations materialise. The cost of operating a CPA shall be borne by the PRS participant who designates it.

It is expected, however, that requests for the provision of technical assistance to the CPAs will increase in the next years together with the evolution of the Galileo system and of the PRS service.

It should be noted that these activities will entail additional human resources.

Additionally, access to PRS technology and ownership or use of PRS receivers, as needed by the Agency in accomplishing the task referred to in Article 29 (1b) of the EU Space Programme regulation and any other PRS related task that the Agency performs, is subject to compliance with the principles set out in Article 8 of Decision 1104/2011/EU and related PRS Common Minimum Standards. This shall comply with the conditions defined in the Specific Arrangement concluded between the EC and the Agency pursuant to Article 14(c) of Decision 1104/2011/EU.

II.02.01.04.01 Tasks until 2024

Some of the tasks described below are subject to a formal request from the European Commission. At the time of writing, the Commission has not requested the Agency to provide support for these activities. The first requests have, however, been received to assist audit activities on Competent PRS Authorities in 2020.

	Activity	Objective	Performance Indicator	Year ⁸
1	EUSPA internal organisation and PRS management plans	Implementation and continuous improvement of the Agency's internal organisational for the management of PRS items and PRS information.	<ul style="list-style-type: none"> Annual update of PRS management plans (PRS general management plan plus supporting documents) made available one month (TBD⁹) before the following year. 	2022 – 2024
2	PRS Article 14 implementation report	Create a report summarising the management of PRS information, all movements of PRS equipment and the associated cryptographic keys, and security breaches observed in relation to the Specific Arrangement concluded between the EC and the Agency pursuant to Article 14(c) of Decision 1104/2011/EU.	<ul style="list-style-type: none"> Report sent to the EC within one month after the end of the reporting quarter, every quarter. 	2022 – 2024
3	Support to CPAs	Provide technical assistance to CPAs on the basis of specific arrangements.	<ul style="list-style-type: none"> Definition of specific arrangements with CPAs and performance of tasks therein specified (when requested). 	2022 – 2024

⁸ The year indicates when the Agency expects to perform the action. These dates are correct as of the time of writing and are based on current plans.

⁹ These are activities identified in Decision 1104/2011 and are not yet defined by the EC. This document will be updated once the information is available.

	Activity	Objective	Performance Indicator	Year ⁸
4	Designated PRS Authority implementation	Implementation of the designated PRS Authority in support of entities requesting the Agency to act as their CPA (Art.5 of Decision 1104/2011/EU).	<ul style="list-style-type: none"> Organisation of the designated PRS Authority and performance of specific tasks identified in the arrangements defined with the requesting entities. 	2022 - 2024
5	Support to the European Commission	Provide assistance to the European Commission carrying out audits or Inspections to CPAs and reporting to the European Parliament and the Council on the compliance by the CPAs with the common minimum standards (CMS).	<ul style="list-style-type: none"> On demand technical support to EC for the performance of audit to CPAs On demand draft report on CPAs' compliance to the CMS 	2022 - 2024

II.02.01.05 Communication, Promotion and Marketing of the Services

One of the Agency's core functions is to engage market stakeholders in the development and adoption of innovative and effective GNSS applications, value-added services and user technology. In support of this function, the Agency extensively monitors the GNSS downstream market, offering forecasts and distilling intelligence for the benefit of European businesses and the global GNSS marketplace. Moreover, in the 2021-2023 period EUSPA will also manage the promotion and market development activities of data, information and services offered by Copernicus. As a consequence, the already existing market segments will be combined and complemented forming a set of integrated market segments transversal to the EU Space Programme Components: Agriculture, Forestry, Fisheries and Aquaculture, Urban Development and Cultural Heritage, Insurance and Finance, Infrastructures, Road and Automotive, Aviation and Drones, Rail, Maritime and Inland Waterways, Energy and Raw Materials, Environmental Compliance, Climate and Weather Services, Biodiversity, Ecosystems and natural capital, Emergency Management and Humanitarian Aid, Consumer Solutions, Health and Tourism, Space and Governmental and Security. This will open up the opportunity to create applications across all space programme components facilitating synergies among them.

All market development and promotion activities during this period will focus on four key areas applicable to all these market segments:

- **Market and user knowledge:** by monitoring the EGNSS, Copernicus and Governmental market and user technology and analysing user needs, requirements and satisfaction, EUSPA will be able to understand future market and technology trends to promote full EGNSS and Copernicus adoption.
- **Demand support:** by designing and implementing an adoption roadmap per market segment, EUSPA will be able to ensure market readiness for EGNSS and Copernicus adoption in all application areas. This will include cooperating with chipset and receiver manufacturers, system integrators, service and solution providers, application developers and end users.
- **Offer Creation:** implemented through the development of the downstream applications based on the Space components, including also Fundamental Elements and integrated applications, as described in Sec. II.02.02.03.
- **Communications and outreach activities for stakeholders, industry, user and R&D communities, and awareness raising activities for the general public.** EUSPA will leverage the main

communication tools and vehicles (websites, social media, established segment-specific conferences and exhibitions, stakeholder networks, etc.), as well as create unique, targeted tools (publications, videos, infographics, etc.) and initiatives (user fora, hackathons etc), to:

- Raise Awareness, understanding, appreciation and use of EGNOS, Galileo and Copernicus.
- Increase Participation in the Horizon Europe funding programme and build awareness of the results coming from its research and innovation activities.
- Strengthen EUSPA international profile, and position the Agency as the leading Agency in EU Space programme management.
- Successful transfer of specific messages that encourage target audiences to support the achievements of the above aims and objectives.

All market segments will see key milestones reached during the 2022-2024 programming period.

In particular, important milestones will be linked to Galileo's various differentiators:

- The provision of the Open Service Navigation Message Authentication (OS-NMA) via public SiS testing (2021) and later on service (2023), which allows for the provision of information to users about the authenticity of navigation data;
- The High Accuracy Service (HAS) that will complement the Galileo Open Service (GOS) and provide higher positioning accuracy that will progressively deliver HAS SiS testing – involving key stakeholders - (2021) and Initial Service (2022)
- The Commercial Authentication Service (CAS) that will be provided on the E6 signal code encryption, further improving the robustness of professional applications by a spreading code encryption targeting its initial operational capability in 2023;
- The Search and Rescue (SAR) capability that will be available at sea, in the mountains, across the desert and in the air and will help locate people in distress with its Return Link (RL).

The Agency will continue to review and further understand user needs, with the end objective of improving EGNOS and Galileo services, enhancing existing applications and launching new emerging ones in all the market segments to reach their complete adoption. Important priorities will remain: in particular, not yet mature and consolidated markets as rail as well as safety critical applications or

Critical Infrastructure will be further analysed with user requirements, value proposition and adoption strategy fostering new added-value EGNSS services.

The number of Galileo-enabled smartphones and dual frequency GNSS receivers is continuously increasing as well as the EGNSS penetration in Maritime and regulated market as Aviation.

Galileo differentiators such as the OS-NMA, HAS, SAS, the dual, triple or quadruple frequency, will play a key role in the Road domain, contributing to the development of fully autonomous vehicles. Similarly, the abovementioned EGNSS differentiators will continue to foster the professional market segments, especially Critical Infrastructures, Energy, Insurance & Finance as well as Agriculture & Forestry and Urban Planning & Geomatics.

Taking on board Market Development and Communication activities also for Copernicus will contribute to increase the overall impact of the EU Space Programmes and the benefits for the users. Copernicus with its services (Land, Maritime, Atmosphere, Climate, Emergency and Security) and data available to users via the DIAS has an increasing strategic value and its investment needs to benefit to the best possible way to the citizens in Europe and across the globe. Market related activities need to focus also on synergies, especially between the EGNSS and Copernicus and linking georeferenced components to the Copernicus data. A special focus will be devoted to the commercial applications of Copernicus while keeping the more established scientific and public ones in mind. In this line, the three above described areas (Market and User Knowledge, Demand Support, Communication) will be systematically extended and integrated in a step-wise approach.

While trying to find synergies with existing GNSS activities, the new Copernicus Market development activities will imply undertaking the Copernicus Communication portfolio across a broad range of activities (web, social media, events) increasing significantly also the outreach activities to an increased user community both at the European level and globally.

II.02.01.05.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹⁰
1	Market and technology monitoring, including cooperation with receiver manufacturers.	1.1 Be the source of competence in GNSS and Copernicus market and technological developments. Output of the objective is the publication of GNSS market and technology report.	<ul style="list-style-type: none"> Timely delivery of market and technology Data – Bi-annual reports 	2022-2024
		1.2 Support chipset and receiver manufacturers in implementing EGNSS. Output of the objective is the List of receiver manufacturers with Galileo and EGNOS capability.	<ul style="list-style-type: none"> Timely delivery of market and technology Data – Bi-annual reports 	2022-2024
2	User scheme management.	2.1 Build user experience and satisfaction; implement user feedback in the evolution of EGNSS and provide elements related to other users for Copernicus. Actions to be undertaken are: <ul style="list-style-type: none"> Include user input in the evolution of the mission requirements document for EGNSS and provide inputs related to other users for Copernicus. Create EGNSS user support improvement plan based on feedback from downstream user sectors and their value chains. Monitor user satisfaction of EGNSS services and performance. 	<ul style="list-style-type: none"> Successful hand-over of user feedback in system/ service evolution (Cycle time of feedback/ requirements definition/ development and release) 	2022-2024

¹⁰ The year indicates when the Agency expects to perform the action. These dates were correct as of the time of writing and are based on current plans.

		<ul style="list-style-type: none"> Define the Galileo GSC support improvement plan based on feedback from downstream user sectors and their value chains. 		
3	Market development by user segment (Agriculture, Forestry, Fisheries and Aquaculture, Urban Development and Cultural Heritage, Insurance and Finance, Infrastructures, Road and Automotive, Aviation and Drones, Rail, Maritime and Inland Waterways, Energy and Raw Materials, Environmental Compliance, Climate and Weather Services, Biodiversity, Ecosystems and natural capital, Emergency Management and Humanitarian Aid, Consumer Solutions, Health and Tourism, Space, Governmental and Security).	<p>3.1 Identify needs and opportunities for services and applications. Actions to be undertaken are:</p> <ul style="list-style-type: none"> Management of user fora and consultation platforms on user needs per segment. Support standardisation and certification activities. 	<ul style="list-style-type: none"> Measure level of YoY market growth per market (User fora numbers, projects number etc) 	2022-2024
		<p>3.2 Maximise market uptake of EGNSS and Copernicus by value chain and its availability to users designing and implementing market uptake synergies by segment</p>	<ul style="list-style-type: none"> Measure EGNSS and Copernicus implementation and their use in applications per market segment (e.g. the number of approach procedures in aviation). 	2022-2024

4	Development and implementation of targeted communication initiatives, as well as campaigns for the general public.	<p>4.1 Management of effective and efficient communications strategy and initiatives, including the new segments part Copernicus. Actions to be undertaken are:</p> <ul style="list-style-type: none"> ○ Participate in conferences and exhibitions and organise targeted events ○ Create and disseminate high quality, tailored content. ○ Manage active and internet-based communications via websites, social media, newsletters, etc. ○ Production and targeted distribution of informative, timely and relevant print, video and multi-media materials. ○ Seize opportunities for organising effective, tailored public, media and stakeholder relations activities. 	<ul style="list-style-type: none"> • % agreed increasing level of YoY awareness (Satisfaction/ feedback/ awareness surveys; media & electronically - articles, comments, shares, hits, tweets, likes etc...) 	2022-2024
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II.02.02 DELEGATED TASKS (FOR INFORMATION ONLY)

II.02.02.01 EGNSS Exploitation Programme Management

The EU Space Programme Regulation 2021/696 adopted on 28 April 2021 established the European Union Agency for the Space Programme (EUSPA). This regulation provides an extension of responsibilities of the Agency in the European GNSS Programmes. In particular, a number of tasks will be added in addition to the ones that were already under the Agency's responsibility.

The Financial Framework Partnership Agreement (FFPA) and the Contribution Agreements, which results from the negotiations between the Commission, the European GNSS Agency and ESA was concluded on 22 June 2021. This agreement will allow them to carry out the space programme in an efficient and effective manner, avoiding duplications and minimising development and operational risks based on the establishment between ESA and EUSPA of synergies on the competences and capabilities of each other with a clear chain of command.

For Galileo, EUSPA shall be entrusted with the following roles and responsibilities:

- The overall role of Galileo exploitation manager;
- The management, operation, maintenance, continuous improvement, evolution and protection of the infrastructure, in particular ground-based centres and stations referred to in Decision (EU) 2016/413 or (EU) 2017/1406, networks, including upgrades and obsolescence management;
- The development of future generations of the systems and the evolution of the services provided by Galileo, without prejudice to future decisions on the Union financial perspectives, including by taking into account the needs of relevant stakeholders;
- The support of certification and standardisation activities related to Galileo, in particular in the transport sector;
- The continuous provision of the services provided by Galileo including the management of contingencies;
- The cooperation with other regional or global satellite navigation systems, including to facilitate compatibility and interoperability;

- Elements to monitor the reliability of the systems and their exploitation, and the performance of the services;
- Support the Commission in the definition and implementation of the PRS uptake and technological roadmap.

For EGNOS, EUSPA shall be entrusted with the following roles and responsibilities:

- The overall role of EGNOS exploitation manager;
- The management, operation, maintenance, continuous improvement, evolution and protection of the space-based and ground-based infrastructure, in particular ground-based centres and stations referred to in Decision (EU) 2017/1406, networks, including upgrades and obsolescence management;
- The development of future generations of the systems and the evolution of the services provided by EGNOS, without prejudice to future decisions on the Union's financial perspectives, including by taking into account the needs of relevant stakeholders;
- The support of certification and standardisation activities related to EGNOS, in particular in the transport sector;
- The continuous provision of the services provided by EGNOS, including the management of contingencies;
- The cooperation with other regional or global satellite navigation systems, including to facilitate compatibility and inter-operability;
- Elements to monitor the reliability of the systems and their exploitation, and the performance of the services;
- Activities related to the provision of services and to the coordination of the extension of their coverage.

In addition, EUSPA and ESA have decided to establish integrated teams for an efficient and streamlined implementation of the tasks entrusted in the frame of the Galileo and EGNOS Components.

Furthermore, the parties have decided to set up a Joint Office for Galileo and EGNOS involving EUSPA and ESA operational staff co-located on an ad hoc, permanent or hybrid basis at the Commission's premises in Brussels, to support the Commission, notably in elaboration of Programme material for Galileo and EGNOS. The Joint Office is operational since October 2021.

In accordance with the FFPA, the Galileo Objectives to be pursued by EUSPA in carrying out its entrusted tasks can be divided in five main areas:

- OBJECTIVE-1: Ensure Galileo services provision;
- OBJECTIVE-2: Ensure security of the Galileo Programme;
- OBJECTIVE-3: Roll out new services or features anticipated in the Space Programme Regulation;
- OBJECTIVE-4: Ensure development and deployment of Galileo Infrastructure evolutions;
- OBJECTIVE-5: Support Commission international activities.

In accordance with the FFPA, the EGNOS Objectives to be pursued by EUSPA in carrying out its entrusted tasks can be divided in five main areas:

- OBJECTIVE-1: Ensure EGNOS services provision;
- OBJECTIVE-2: Ensure security of the EGNOS Programme;
- OBJECTIVE-3: Develop new EGNOS services enabling new applications;
- OBJECTIVE-4: Ensure EGNOS evolution;
- OBJECTIVE-5: Support Commission international activities.

II.02.02.01.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹¹
	Full exploitation programme management	Effectively and efficiently manage of the exploitation programme activities for Galileo and for EGNOS. This includes the management of the planning and execution of Galileo and of EGNOS Services Programme activities, including integrated planning, schedule, budget, costs and risks management, safety management, reporting, performance and assets management.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Service design and definition	Design and define the EGNSS services from early phases to service implementation, through the complete life cycle of the service definition	<ul style="list-style-type: none"> % of service milestones achieved versus plan 	2022-2024
	Full service provision and operations	Manage the service provision of EGNOS and of Galileo, including the service delivery activities, the operations of the core infrastructure (including service and support facilities), its maintenance services and corresponding adjacent services (e.g. Galileo GDDN)	<ul style="list-style-type: none"> % Compliance with the published Service Definition Documents 	2022-2024
	Corrective and evolutive maintenance	Perform the corrective and evolutive maintenance of the Galileo and EGNOS	<ul style="list-style-type: none"> Level of compliance to the maintenance SLA and/or maintenance releases milestones achieved versus plan 	2022-2024

¹¹ The year indicates when the Agency expects to perform the action. These dates were correct as of the time of writing and are based on current plans.

		infrastructures. Be the system qualification authority for changes in the systems in service		
	Procurement of the design, development, qualification, and validation of all service-related facilities ground infrastructure	Perform the procurement of the design, development, qualification, and validation activities of all service-related facilities ground infrastructure that are necessary to achieve the service objectives. This includes SAR, evolutions of WP3x-based satellite monitoring and control facilities, GSF, SECMON, POC-P, EDAS support facility.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Procurement of Galileo launches	Procure the Galileo launch services as defined in the FPPA (for Galileo starting with Launch 15).	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Management of activities assigned to the European Space Agency	Manage all the activities assigned by the Agency to be performed by the European Space Agency. in the field of EGNSS, including upstream R&D (infrastructure), design and development of new system generations (G2G, EGNOS V3)	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Plan towards Prime of Galileo System in Operations	Ensure readiness from EUSPA to be: (i) responsible for changes to the system in operation for the purpose of (maintenance and) short to mid-term improvements; (ii) responsible for changes to the system in operation for the deployment of ground in operational infrastructure	<ul style="list-style-type: none"> Timely approval of the GNSS Exploitation management Plan Timely release and implementation of the new Service and System support contract Timely update of processes Timely implement a joint EUSPA-ESA Integrated team management plan 	By mid-2023
	Plan towards OS FOC	Implement industrial activities as per "GSA Service Roadmap" Review EUSPA (Internal/External) process	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024

Transfer of contracting authority for Galileo contracts	Demonstrate EUSPA readiness for assignment of Galileo contracting authority for implementation of contract	<ul style="list-style-type: none"> • Assignment may be effective not earlier than 1 January 2023 and no later than 30 June 2023 • Decision by the EC may be taken after taking into account ESA's opinion 	2023
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II.02.02.02 GOVSATCOM

In the period 2022-2024, the Agency shall conclude the preparatory activities entrusted by the Commission under the GOVSATCOM preparatory action CA:

- Consolidating the network of governmental satellite communication users, and collecting, analysing and consolidating their respective needs and requirements. That will support the creation of the needed policy instruments by the European Commission. Furthermore, an adoption roadmap addressing the several governmental application areas will be defined leveraging the synergies with the other EU space programme components which will pave the way for a rapid and harmonised access to secure satellite communications;
- Supporting the Finalisation of the definition of the GOVSATCOM security requirements, as a result of the assessment of relevant security aspects, such as but not limited to risk and threat analyses;
- Concluding the procurement of alternative design options for the GOVSATCOM ground infrastructure (Hubs).

The following activities are to be implemented, within the budget available, entrusted by the Commission under the Contribution Agreement:

- Based on the user-related aspects of GOVSATCOM, implemented in the scope of the downstream activities, coordinate the service portfolio and the sharing and prioritisation of services.
- Procurement of the secure operational ground segment (GOVSATCOM Hubs). On the basis of the studies performed within the GOVSATCOM Preparatory Action, and under the oversight of the Commission, EUSPA shall act as contracting authority and manage the procurement of the development of secure operational ground segments (GOVSATCOM Hubs). Development of specific remote communication systems, terminals and software needed for the end-to-end secure services provision.
- Support, upon request of the Commission, the definition of the business, technical, legal and financial aspects of Service Level Agreements (SLAs) with Member States and providers; and their implementation.
- Security tasks related to GOVSATCOM.
- Support the Commission on system and services evolution, including security aspects.

- Coordinate the network of users and analyse their needs and requirements with the aim to build the user perspective and assess the trends of the market demand.
- Extend the European GNSS User Consultation Platform to the area of satellite communications for civilian governmental users, in order to exploit potential synergies with other services provided by the space programme Components.
- Market monitoring including biennial publication of market and user technology reports focusing on the space services for governmental users and synergies among the secure services offered by the space programme Components

II.02.02.02.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹²
1	Coordination of the governmental satellite communication users	Consolidation and coordination of the network of governmental satellite communication users and collection, analysis and consolidation of their respective needs and requirements.	<ul style="list-style-type: none"> H2020 CSA project successful completion 	2022-2023
2	Provide support to the Commission with the aim to define the relevant implementing acts	Support the Commission in the definition of the service portfolio and the sharing and prioritisation of services	<ul style="list-style-type: none"> Contribution to the drafting of the service portfolio, sharing and prioritisation, operational user requirements and hubs location 	2022-2024
3	GOVSATCOM security support (general)	Assistance to Commission in the definition of the security aspects of the component	<ul style="list-style-type: none"> Contribution to the drafting of the risk and threat analysis and the security requirements of GOVSATCOM 	2022-2023
4	GOVSATCOM security support (Hubs)	Assist the Commission in security related tasks of the GOVSATCOM Component; In relation to the procurement of the secure operational ground segment (GOVSATCOM Hubs) and its operations to propose evolutions of the security requirements baseline, assist the Commission in security related tasks of the GOVSATCOM Component; Ensure that the Hubs are operated within the boundary of the accreditation;	<ul style="list-style-type: none"> Evolutions of the security requirements baseline 	2022-2024

¹² The year indicates when the Agency expects to perform the action. These dates were correct as of the time of writing and are based on current plans.

5	GOVSATCOM ground infrastructure	Procure the secure operational ground segment (GOVSATCOM Hubs).	<ul style="list-style-type: none"> Procurement of the Hub preliminary design studies implemented. Initiation of Hubs development. 	2022-2024
6	Operation of GOVSATCOM Hubs	Procure the GOVSATCOM Hubs operation services.	<ul style="list-style-type: none"> Preparation of the procurement for GOVSATCOM Hubs operator. 	2024
7	Development of specific remote communication systems (<i>pending the verification of the need by the Commission</i>)	Coordinate the activities for the development of specific remote communication systems, terminals and software needed for the end-to-end secure services provision	<ul style="list-style-type: none"> Procurement of development preparation activities 	2023-2024
8	Downstream activities	Coordinate the network of users and analyse their needs and requirements. Extend the European GNSS User Consultation Platform to the area of satellite communications for civilian governmental users. Conduct market monitoring including biennial publication of market and user technology reports.	<ul style="list-style-type: none"> Publication of market and user technology reports 	2023-2024

II.02.02.03 Space Situational Awareness Activities

For the SSA Component, EUSPA shall support the Commission as far as project management and technical matters are concerned, in particular in preparation of the security management and the operational users' management/coordination.

EUSPA shall as well provide support to the Commission in security, in the elaboration of the SST sub-component general security requirement, in the use of off-line encryption means, and – in complementarity with the tasks performed by the EUSST Partnership – in the Commissions responsibility with regards to SAB in the accreditation.

EUSPA shall provide technical input to the Commission Programme Committee configurations and sub-groups, expert groups, task forces, workshops, and stakeholder consultations

In case the general security requirement and the afferent Risk & threat analysis confirm the necessity to identify a structure to monitor security and to follow the instructions developed under the scope of the 2021/698/CFSP, EUSPA will be designated as this structure. In which case:

- EUSPA will ensure security monitoring duties (SECMON) of the SST networks and infrastructure and be the interface of EEAS with regards to the execution of instructions defined in accordance with 2021/698/CFSP;
- EUSPA will develop and deploy the necessary SECMON systems in complementarity with the infrastructure development and deployment performed by the EUSST Partnership under its dedicated budget and contractual framework;
- EUSPA will, in complementarity with the means deployed by the EUSST Partnership under its dedicated budget, ensure the deployment and operations of electronic means to exchange operational classified information linked to the management of incidents and the execution of instructions in accordance with 2021/698/CFSP between the Partnership, the Commission the EEAS up to the level SECRET UE/EU SECRET;

In accordance with the FFPA and the Contribution Agreement, the activities to be conducted by EUSPA in carrying out its entrusted tasks can be divided in three main areas:

- Contact with users on the quality of services: EUSPA shall monitor and report about the quality of services for users.
- Ensure the operation of the helpdesk for users: EUSPA shall provide a help desk which provides the main support interface between SST users and NOCs (national operation centres) regarding all information exchange related to the EUSST Service Provision Portal and the SST services and information offered.
- Develop information and communication campaigns: EUSPA shall launch promotion and communication campaigns.

The tasks entrusted to EUSPA related to user uptake of information and services will be further detailed in the future.

EUSPA, relying on its know-how and processes on security operations (stemming notably from Galileo Security Monitoring), engineering, and underlying organisation will:

- Foster synergies between SST components and Galileo
 - CD-698 interface for Council's instructions implementation, extension of CD-496 (ex-JA) to SSA/SST
 - Cyber and Security monitoring synergies with already monitored Galileo systems (GSF, SOIF, GRON, GDDN, GCS, GMS)
 - Operations and Service provision 24/7, extension of PRS helpdesk perimeter, Secret-UE/Crypto operations
 - Anonymity of classified or sensitive information (PRS-like), handling of interfaces on CLA and UNCLA environment (GRON, SIN-MN, Internet)
- Contribute to general security tasks
 - Synergies within accreditation strategies and processes, and activities in preparation of the SAB decisions
 - Support to COM on Security and Cyber requirements and associated risk assessment
- Coordinate with EUSST Partnership
 - Upon request, EUSPA contribution to Partnership evolution to be provided
 - EUSPA Participation in EUSST committees as required by the Programme and the Partnership

II.02.02.04 Research & Development Activities

The European Commission delegated to the Agency responsibility for implementing the following Research & Development programmes:

- Horizon 2020
- Fundamental Elements

Both programmes were running in the financial perspective 2014-2020 and the vast majority of projects has already been concluded, however several projects will continue running in 2022.

Horizon 2020 is the EU Framework programme for research and innovation. According to the general provisions of the Delegation Agreement signed in April 2014 and subsequently amended, the Commission entrusts the Agency with the implementation of tasks under the following part of the Horizon 2020 Specific Programme: Galileo-related activities within the activity “Space” of the specific objective “Leadership in Enabling and Industrial Technologies” of Part II “Industrial leadership” as defined in the annual Work Programmes.

Fundamental Elements is the second EU R&D funding mechanism supporting the development of EGNSS-enabled chipsets, receivers and antennas included in the Delegation Agreement concluded between the European Commission and the European GNSS Agency (GSA) on the Exploitation Phase of the Galileo Programme signed on 2 October 2014. The main objectives of the Fundamental Elements are:

- Facilitate the adoption of the European GNSS Systems, building on their innovative services and differentiators;
- Improve the competitiveness of EU industry;
- Address user needs in priority market segments;
- Maximise benefits to European citizens.

The Agency is also entrusted with the management of project granted under the Aviation Grants.

The main objective of this programme is to increase EGNOS adoption in civil aviation. In 2022, the Agency will be still involved in management of the on-going projects.

Starting from 2021, EUSPA - in close coordination with the Research Executive Agency, the Climate and Innovative Networks Executive Agency and the European Health and Digital Executive Agency to guarantee the necessary synergies - has been delegated implementation of the Horizon Europe programme for the development of downstream applications based on the EU space programme components, to be performed in an integrated strategic approach with its market development and user uptake core tasks. Building on the past experience, detailed analysis of the existing R&D funding gaps as well as taking inputs from the various consultations with user, Member States and other stakeholders, the Agency plans to implement several new R&D tools including developing as appropriate excellence centres leveraging existing infrastructures and stimulating cooperation with private investors such as venture capitals. In addition to this, the calls to be launched under the Horizon Europe framework could address, among other aspects, benefits that Space solutions could bring for Equality, Diversity and Inclusion and could explore synergies with other Horizon Europe Clusters (e.g. Cluster 6 Food, Bioeconomy, Natural Resources, Agriculture and Environment).

The Agency will support the European Commission's Space Entrepreneurship Initiative CASSINI, and be part of its the implementation focusing on the commercial growth of space-related start-ups and SMEs and improving access to risk capital by attracting more venture capital funds to focus on space investments and making companies investment-ready. The CASSINI initiative will help create synergies between the EU space programme, the Commission's industrial strategy and Horizon Europe, and foster an innovative and competitive European space sector. The Agency will have a key role in managing CASSINI actions and creating a link between entrepreneurs and industrial companies and venture capital investors through a series of matchmaking events. Starting in 2021 and 2022 respectively, the Agency will manage CASSINI Prizes and CASSINI Hackathons and Mentoring, innovation competitions meant to stimulate new business concepts and products based on Copernicus and EGNSS. The Agency will cooperate with the Commission in the implementation of CASSINI Business Accelerator and CASSINI Matchmaking in 2021-22.

More in detail, the following six activities will be implemented by the Agency, under a contribution agreement between the Commission and EUSPA:

1. EIC Horizon and CASSINI Prize for digital space applications

The specific rules of the contest ("the challenge") will be published in 2021.

Expected results: The prize will be awarded to the three-best data-driven marine or maritime digital application(s) meeting the criteria of the contest. The application uses Copernicus and/or Galileo data in combination with other data sources, and aims at solving problems or meeting customer needs related to the detection, tracking, monitoring and removal of plastics in rivers, shores, coastal zones and marine environments.

The indicative budget for the prize is EUR 3.4 million from the 2022 budget.

Indicative timetable of contest(s):

Stages	Date and time or indicative period
Opening of the contest	Q3 2021
Deadline for submission of application	Q2-Q3 2022
Award of the prize	Q3-Q4 2022

Type of Action: Inducement Prize

2. EIC Horizon and CASSINI Prize for space technology products and services

The specific rules of the contest ("the challenge") will be published in 2021.

Expected results: The prize will be awarded to one or several best solution(s) for implementing an EU developed and manufactured fully or partially reusable microlauncher solutions using green (environmentally sustainable) propulsion and launched from EU territory. The awarding of the prize is expected to leverage more private investment capital to the contestants.

The indicative budget for the prize is EUR 5.00 million from the 2022 budget.

The prize relates to the development of European critical space infrastructure, which is of strategic importance and security-critical for the Union and its Member States. Therefore, the rules of contest will:

- a. stipulate that a proposal may be rejected for security reasons;
- b. provide further details on the development and deployment of the solution.

Indicative timetable of contest(s):

Stages	Date and time or indicative period
Opening of the contest	Q3 2021
Deadline for submission of application	Q2-Q3 2022
Award of the prize	Q3-Q4 2022

Type of Action: Inducement Prize

3. Support European “New Space” entrepreneurship through CASSINI Space Entrepreneurship Initiative 2021-2027 - Hackathons & Mentoring

Implementation: the action will be implemented by the Commission through a specific contract 2021-2023 under the existing Copernicus Framework Contract.

Amount: The contract for Year 1 of Hackathons & Mentoring will have a commitment of EUR 1.2 million on the 2020 Galileo Programme budget, and to activate the extension for Year 2+3 a commitment of EUR 2.40 million will be made on the **2022 budget of** Horizon Europe.

Expected Outcomes:

- To stimulate the spur-of-the-moment development of innovative applications based on data and information coming from Copernicus satellite images and EGNOS and Galileo positioning signals and services.
- To develop prototypes further into viable business propositions.
- To provide training opportunities on how to access and use data from Copernicus and EGNOS/Galileo with data analytics tools and artificial intelligence.
- To promote the EU’s space programmes Copernicus and EGNOS/Galileo to a broader audience.

Type of Action: Public procurement

Indicative budget: EUR 2.40 million from the 2022 budget

4. Innovation activities for improved EGNSS operation and service provision

To design and validate the provision scheme of new services, the development of service demonstrators for EGNOS and for all services of Galileo (including PRS) will be required. Service demonstrators enable early simulation of new service concepts at early stages of maturity, supporting the definition of the mission requirements. These activities will contribute to the decision of whether to implement a new service, providing initial feedback from future potential users on the various options considered and on the service provision requirements. In addition, the improvement of the complex operations is essential to improve the performance of EGNSS services. Likewise, maintenance activities must be subject to a continuous improvement process to guarantee the service continuity.

Actions under this area will cover the development and use of service demonstrators to consolidate the future EGNSS services, the optimization of the operation schemes using advanced dynamic strategies (e.g. machine learning) for Galileo constellation / system management for the efficient and continuous provision of the full portfolio of Services in EGNOS and in Galileo, and others.

Indicative budget for this action: EUR 5.00 million from the 2021 budget. The awarded projects under this action will be managed by the Agency in 2022.

5. Development of applications for Galileo, EGNOS and Copernicus

Actions under this area will address downstream R&D activities in the form of calls to proposals to be launched by EUSPA in accordance with the specification included in Annex XI.

The Agency needs to make the best use of EGNSS and Copernicus capacities for EU citizens, companies and society. Research and innovation should therefore foster the development of EGNSS downstream applications and promote their adoption in the EU and worldwide, in particular in markets with a long lead-time (e.g. maritime, rail, aviation), and in areas where Galileo offers unique differentiators (high accuracy, authentication, Search and Rescue, PRS).

Copernicus based applications and services can serve, for example, polar research, monitoring of the environment, maritime and coastal monitoring, natural disasters, civil security, migration and agriculture. They and can bring, with EGNSS, a key contribution to the European Green Deal and to the sustainable management of natural resources. The public sector should be supported as customer of space-based technologies via innovation procurement. Synergies between Galileo/EGNOS and Copernicus, as well as synergies with non-space programmes, leveraging the combination of space

data with non-space data, will open new avenues for the creation of a wealth of new and innovative applications and services. The use of Copernicus and Galileo/EGNOS for the EOSC and DestinE initiatives should equally be taken into account and promoted.

Indicative budget for this action: EUR 32.60 million from the 2021 budget and EUR 48.10 million from the 2022 budget

6. Tender evaluation, project monitoring and audits (EGNSS/Copernicus downstream)

This action will support the use of appointed independent experts by EUSPA for the monitoring of running projects, tender evaluation and audits where appropriate.

Indicative budget for this action: EUR 0.50 million from the 2021 budget and EUR 1.00 million from the 2022 budget

Legal entities:

European Union Agency for the Space Programme - EUSPA

Form of Funding: Indirectly managed actions

Type of Action: Indirectly managed action

Indicative budget: EUR 38.10 million from the 2021 budget¹³ and EUR 59.90 million from the 2022 budget¹⁴

Where appropriate, the Research and Development activities will include also Fundamental Elements, integrated applications among programme components as well as actions to foster and innovative and competitive space downstream sector.

¹³ Of which EUR 19.72 million from the 'NGEU' Fund Source.

¹⁴ Of which EUR 32.69 million from the 'NGEU' Fund Source.

II.02.02.04.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹⁵
	H2020 on-going projects Management	Effectively and efficiently manage the on-going projects in terms of objectives, planning, budget and reporting.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Fundamental Elements on-going projects Management	Effectively and efficiently manage the on-going projects in terms of objectives, planning, budget and reporting.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Horizon Europe management following the DA	Launch the Horizon Europe calls for proposal following the WP, manage the projects award and implementation.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Aviation Grants	Effectively and efficiently manage the on-going projects in terms of objectives, planning, budget and reporting.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024
	Entrepreneurship Initiative	Launch and implementation of the new start-up support programme in the context of the CASSINI Space Entrepreneurship initiative.	<ul style="list-style-type: none"> Ratio of achieved Programme and Contractual milestones versus plan 	2022-2024

¹⁵ The year indicates when the Agency expects to perform the action. These dates were correct as of the time of writing and are based on current plans.

II.02.02.05 User Uptake Activities

In addition to the R&D programs described in the section above, several activities will be performed by EUSPA in the period 2021-2023 under delegation from the European Commission:

- Support to the European Commission in the implementation of the Space Strategy for Europe
In 2016, the European Commission published a 'Space Strategy for Europe', with the aims of maximising the benefits of space for society and the EU economy, fostering a globally competitive and innovative European space sector, reinforcing Europe's autonomy in accessing and using space and strengthening Europe's role as a global actor. To implement this strategy and its potential follow up, EUSPA will support EC in activities that will impact the market uptake of the Space Programme components (including support to the design and implementation of the regulatory measures, standardization activities, impact assessments, stakeholder consultations etc.).
- Extension of the User Consultation Platform (UCP) to Copernicus and GOVSATCOM users.

As GSA successfully ran in the past the EGNSS User Consultation Platform (UCP) in close cooperation with the Commission, in the same way EUSPA plans to manage the UCP for Copernicus and GOVSATCOM collecting user needs and requirements and addressing also synergies among all the space programmes. The consultation is an essential tool for market uptake ensuring a user centric approach. The formal process of collection of user requirements gives traceability and transparent input to the design of new services (including potentially integrated services) and improvements of existing ones, providing end users with a platform for this. For Copernicus EUSPA will focus on the involvement of other users in the UCP.

- Support to the European Commission in the area of International Relations

GNSS is operating on global scale and cooperation with non-EU partners is an essential element for the uptake of space downstream services. EUSPA will support the European Commission upon request in executing the international cooperation at industrial level as well as supporting EU companies in reaching other non-EU markets for their products and solutions.

- Support to the European Commission in space data management

The potential role of EUSPA in data management relates to an enabling layer/ facilitator between the services and the final users, i.e. adaptation of the data formats and accessibility to the specific user needs. EUSPA can assist the DIASes (Data and Information Access Services) in business development and in assessing their market potential, while gathering the users' feedback on current approach

- Capacity building activities

The backbone of innovation in GNSS is skilled and trained people. Capacity building in this regard is coming from the industry itself, R&D institutes and academia. While solid technical knowledge is acquired first at university level, the GNSS field (as other high-tech fields) is dynamic and thus the life-long-learning principle applies. EUSPA will build on successful Capacity Building activities in the past and adapt its efforts for the future, leveraging and re-shaping initiatives like GNSS professional training sessions, university networks, internship programmes and also innovative online trainings (e.g. Massive Open Online Courses (MOOCs)).

II.02.02.05.01 Tasks until 2024

	Activity	Objective	Performance Indicator (PI)	Year ¹⁶
	Support to implementation of EU Space Strategy for Europe	Maximize the market uptake via implementation of specific activities within the space strategy for Europe upon request of the EC	<ul style="list-style-type: none"> Timely delivery of inputs for the implementation of regulatory measures, standardization activities, impact assessments, stakeholder consultations, etc. 	2022-2024
	User Consultation Platform extension	Annual update of user needs and requirements	<ul style="list-style-type: none"> Timely delivery of the User Requirements Document extended to GOVSATCOM and Copernicus 	2022-2024
	Support to international cooperation	Implement specific support actions upon request of the EC	<ul style="list-style-type: none"> Timely delivery of inputs to support the international cooperation at industrial level for EGNSS and Copernicus implementation and their use in no-EU countries 	2022-2024
	Support to space data management	Implement specific support actions upon request of the EC	<ul style="list-style-type: none"> Timely delivery of inputs to assist the DIASes in business development and in assessing their market potential 	2022-2024
	Capacity building	Design and implement a roadmap for capacity building in downstream space	<ul style="list-style-type: none"> Measure the number of GNSS professional training sessions, university networks, internship programmes and online trainings performed 	2022-2024

¹⁶ The year indicates when the Agency expects to perform the action. These dates were correct as of the time of writing and are based on current plans.

II.03. Human and Financial Resource Outlook (2022-2024)

II.03.01 OVERVIEW OF THE PAST AND CURRENT SITUATION

The Agency is regularly reviewing the allocation of resources to its activities. It requires a critical assessment considering all parameters given the limited available resources, the request to reduce the CA staffing number to the number included in the legislative financial statement by no later than 2027 and the necessity for specific activities to be performed by staff only without a possibility of outsourcing the activity to service providers.

II.03.02 RESOURCE PROGRAMMING FOR THE YEARS (2022-2024)

II.03.02.01 Financial Resources

The overall commitment appropriations for the year 2022 amount to 70 032 491,77 EUR. This amount consists of the EU contribution in the amount 68 345 459,77 EUR and the European Free Trade Agreement (EFTA) contribution in the amount of 1 687 032 EUR.

The estimated budget for 2023 is 76 608 864 EUR. It consists of the maximum ceiling for the EU contribution in 2023 is 72 812 237 EUR, an amount of 1 950 000 EUR covering Union Secure Connectivity Programme and the estimated EFTA contribution in the amount of 1 846 627 EUR. For the year 2024 the estimated overall budget is 80 562 083 EUR, consisting of maximum EU contribution 75 770 165 EUR, an amount of 2 850 000 EUR covering Union Secure Connectivity Programme and estimated EFTA 1 941 918 EUR.

Overall staff costs are expected to increase in 2022 by approximately 27 % to the amount of 31 894 556,77 EUR. Salary assumptions are based on existing real costs per grade and staff. Current correction coefficients for the place of living have been applied to staff located in the Czech Republic, France, Spain, and the Netherlands (88,1 %, 119,9 %, 96,3 %, and 111,4 % respectively for July 2021 to June 2022). Part of the staff costs are linked to the installation and one-off costs for all new staff, in accordance with the Staff Regulations. In particular during the period 2021-2023 the Agency is expecting to recruit a number of new Temporary Agents in line with a revised legislative and financial statement to undertake EUSPA's new activities as stipulated in the EU Space Programme Regulation.

Multilingual tuition costs for children are likely to increase in proportion to the number of staff and indexation of the costs.

Concerning the recruitment costs, it is expected that they will remain stable due to the fact that the Agency intends to combine recruitment procedures for similar posts to ensure efficiency and continue using the combination of online and on-site interviews.

Mission expenses (1 000 000 EUR) increase in terms of additional staff. Videoconferencing is used whenever appropriate and possible.

Training budget (628 000 EUR) remains stable. The Agency has continuously sought effective and financially efficient training methods, such as group training sessions for staff where appropriate, EC aggregated training opportunities and, wherever possible, taking advantage of “in-house” training to pass on knowledge between staff members.

The Agency pays 25 % of the market rate for the Agency HQ building, which costs approximately 5,9 Million CZK per year (approximately 236 thousand EUR). Utility consumption costs are expected to increase only in proportion to the number of additional staff in 2022. Facility management, reception, hosting services, and security services for all sites are indexed and thus will also increase to a minor extent in 2022. During the period 2022-2023 the Agency expects to continue efforts to develop a new HQ for EUSPA, driven in particular by security and ICT needs, and the extension of the GSMC Saint-Germain-en-Laye facilities, driven by GSMC operational demands. The Agency will keep the Board and the Commission informed about the evolution and the budgetary impact of the plans for the development of a new HQ in Prague, new GSMC facilities and the Digital Transformation programme.

The fact that the Agency has a number of separate locations creates an unavoidable budget burden in terms of administrative costs. The Agency has set up IT applications and videoconferencing capabilities to minimise costs associated with missions. However, there is a particular impact on investments and their associated maintenance costs that is reflected in the Data Processing and the Telecommunications budgets. In particular, the Agency plans during the period 2021-2023 to develop an EUSPA Digital Transformation programme, to ensure that the Agency has in place the IT needed to perform its functions. In particular, this is expected to include the development of two redundant data centres.

The Title 3 operational core budget covers the Agency's core tasks as stipulated by the EU Space Programme Regulation.

Market development applications, contributions to the commercialisation and awareness of Galileo and EGNOS, and communication and promotional activities are, in total, expected to require a budget of approximately 4 100 000 EUR per year for this period.

The SAB budget of 1 000 000 EUR will be used for accreditation support contracts that are required to perform technical activities linked to the security accreditation process and, in particular, to the ongoing preparation of the upcoming Galileo system accreditation milestones. These support contracts are essential to providing the expected level of support to the SAB, as stipulated by the EU Space Programme Regulation.

For the operation of the GSMC, operational support contracts in the total amount of 2 500 000 EUR will be required for 2022 to ensure the operational, technical and security activities contributing to all GSMC services for the GSMC Master and back-up sites.

For EUSPA the new role on operational security assigned to the Agency by the EU Space Programme Regulation, operational support contracts will be required for an estimated amount of up to 12 750 000 EUR per year. These support contracts will be crucial to ensuring the activities supporting this new responsibility of the Agency. Further, limited additional budgets will also be required for EUSPA's other new core tasks during the period 2022-2024, including for security accreditation of all components of the programme and Copernicus market development and communications.

II.03.02.02 Human Resources

New tasks and growth of existing tasks

The tasks and activities listed in this document require appropriate staffing, not only from programme perspective (i.e. EGNSS, Communication, promotion and marketing of the services, Security accreditation tasks etc.), but also from an associated corporate support perspective.

In terms of the establishment plan for 2020, the Agency concluded the year with 150 Temporary Agent posts filled (including 5 offered posts), which translates into 100% fulfilment of the establishment plan.

With regard to the establishment plan 2021, the Agency undertook an exercise to allocate the foreseen resourcing to the identified tasks. The selection processes were launched and by the end of 2021, 191 Temporary Agent posts were filled, including 22 offers in line with the final number of posts confirmed in June 2021.

Concerning the CA posts, the Agency has initiated an exercise of gradual and progressive reduction of their total number to the number included in the legislative financial statement by not later than 2027 whilst paying the highest attention to ensuring the continuation of business and ensuring priorities of GSMC operations and security activities.

The Agency deploys in the best efficient way all the available resources to fulfil its assigned areas of competence to optimise the budget, relying on a pro-active, modern and forward looking, efficient set of HR policies, planning & monitoring tools and related processes driven by measurable performance, balancing risk, and assuring compliance with its regulations.

The Agency will continue its effort to attract, recruit and retain highly competent staff through more integrated talent acquisition and development approach. This is to be supported through processes of strategic workforce planning including external and inter-agencies recruitment and internal staff deployment promoting career development. Recruitment will continue to utilise extensive and targeted advertising of the vacancy notices through the EUSPA e-recruitment tool, specialised job boards as well as social media combined with initiatives to increase its visibility and employer branding. Video interviewing suite will continue to be used as an additional tool to streamline the selection procedures and to obtain the best qualified candidates.

The Agency will continue to make strong use of the corporate Commission learning management system which will further strengthen the cost-efficient approach in relation to developmental activities. Specific training activities with regard to the areas of the Agency, i.e. cyber security, will continue.

Effort will be dedicated to further streamline and automate the human resources management processes to achieve efficiency gains. In this context, the Agency shall continue on the implementation of additional Sysper modules. The Agency will further consolidate the use of online tools for various HR processes (i.e. recruitment and performance management).

II.03.03 STRATEGY FOR ACHIEVING EFFICIENCY GAINS

Efficiency gains are expected on a qualitative level due to:

- Compliance with applicable management standards, ISO 9001 requirements, and the European Commission's Internal Control Standards.
- Effective use of the WBS for analysing and streamlining activities and processes, identifying synergies among departments and avoiding work overlaps.
- Regular assessment of the allocation of resources to ensure they align with priorities.
- Efficient mission management: videoconferencing is being utilised wherever appropriate and, when possible, missions are being planned in advance.
- Synergies with other EU agencies in areas such as procurement to reduce costs through economies of scale and reduce the administrative burden.
- Efficiency gains through more automated work (e.g. e-tool for recruitment, e-HR tool (Sysper), paperless performance management tools, an IT e-ticketing system, the introduction of a budget management tool to facilitate budgetary planning and execution, implementation of a fully-fledged Document Management System, and the use of a paperless financial validation tool).

Negative priorities/Decrease of existing tasks

Overall, the Agency's tasks are being maintained or are increasing in a number of areas. This means the scope for finding savings from decreases within existing tasks is extremely limited. It should be noted, however, that the Agency does thoroughly review its priorities on an annual basis through the objective setting exercise to best focus its energies, with regular status checks and a possible reprioritisation on a quarterly basis through the Quarterly Progress Meeting chaired by the Executive Director. It is noted that, so far, no negative priorities have been identified as all identified tasks need to be performed, and that the big majority of the Agency's activities are delegated activities where the workload coming from the Commission continues to increase, rather than decrease. Where it has not been possible to undertake particular activities by Agency staff members due, in particular, to staffing constraints, a recourse to outsourcing has been opted for.

Redeployment of resources in view of budgetary constraints

The Agency analyses the allocation of posts to optimise the use of existing resources, including staff redeployments when required, but in particular when there are changes in the tasks related to either

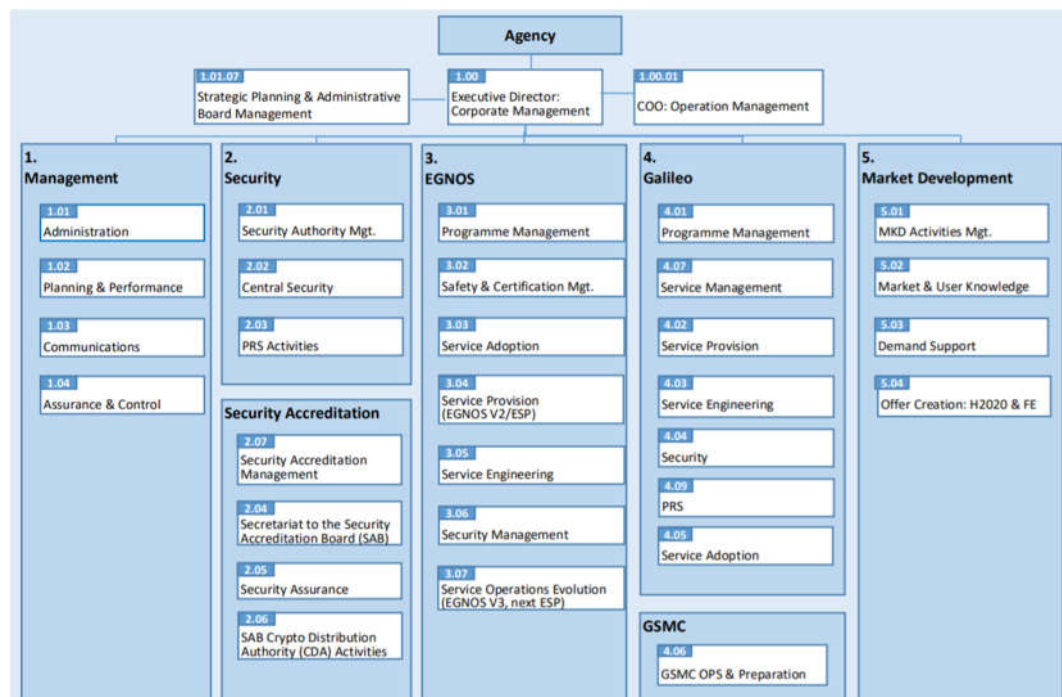
core or delegated tasks. As a multisite Agency, this can mean the redeployment of staff between different sites. It should be noted that the redeployment of resources is also mirrored through changes in the Work Breakdown Structure, which provides the mapping of all tasks.

Section III - Work Programme 2022

This section is the equivalent of a financing decision in accordance with Article 72 of the Agency Financial Regulation¹⁷. Further, article 32(3) specifies that this document should contain the following items:

- Description of all activities that require financing (in this section);
- Indication of the amount of financial and human resources allocated to each activity (included as a specific section for each activity listed in Section III.02); and
- Indication of any tasks that have been added, changed or deleted in comparison with the previous financial year (included in the tables for each objective linked to each activity).

All activities are mapped in the Agency's Work Breakdown Structure (WBS) below. It is expected that this will be revised in the course of 2021 to reflect the new Agency tasks. Each objective is organised with the appropriate WBS number as a reference.



¹⁷ Ref: GSA-AB-WP-69

III.01. Executive Summary

The Agency's 2022 core activities are an extension of its activities from previous years. The SAB will continue to approve launches, authorise ground stations and the systems in their various configurations, and provide body authorisations. The accreditation activities already in place for Galileo and EGNOS will gradually cover the other components of the EU Space Programme.

Separate from its accreditation work, the Agency also intends to work on other security-related tasks. These will focus on the implementation of operational security and of the Agency's responsibilities regarding Competent PRS Authorities and the assistance it may provide to other CPAs should the adequate level of human resources be made available.

The Agency will upgrade its service capabilities associated with the GSF and SOIF/SECMON programme deliveries. It will also pay close attention to the reorganisation of the GSMC-sites and the impact this reorganisation has on the operation and migration of new system releases.

The Agency utilises an Integrated Management System (IMS) to safeguard service quality and continual improvement of its services, which has been ISO 9001 certified since December 2014.

The Agency's controls will be adapted to the new EC Internal Control Framework.

III.02 Core Activities

III.02.01 SECURITY ACCREDITATION (WBS 2.04, 2.05, 2.06, 2.07)

In accordance with the EU Space Programme regulation, the Security Accreditation Board (SAB) prepared section III.02.01. It is being incorporated into this work programme, without any change.

III.02.01.01 Overview of the Activity

The SAB, an independent body within the Agency, is the security accreditation authority for all the components of the Space Programme of the Union.

The Agency's security accreditation activities enable the SAB to make informed decisions, focusing on the authorisation points listed in section II.02.01.01. These security accreditation activities include:

- **SAB secretariat:** a secretariat of staff, allocated to the SAB, prepare and facilitate the meetings of the SAB, its subordinate bodies and its groups of experts, and support security accreditation recommendations and decisions. SAB meetings are planned to address the needed decisions for the various programme milestones for the 5 components of the Programme, after due consultation of the SAB subordinate bodies. The SAB secretariat maintain and retains all security accreditation decisions made by the SAB and communicate them to the EC.
- **Support to SAB management:** the SAB secretariat take care of all relevant resources needed by SAB, including managing and drafting the work programme, budget, human resource planning, estimate and request of any other needed resource, and day-to-day management of the security accreditation resources. The SAB management fully complies to all policies and processes in force in the Agency.
- **Management of special subordinate bodies:** the staff allocated to the SAB guarantee the chairmanship, provides professional expertise and the administrative secretariat for special subordinate bodies such as the Security Accreditation Panel and its expert groups.
- **System, service and operation level activities:** the SAB and its secretariat are actively engaged in system reviews encompassing design, service and operation accreditation aspects, security assessments to verify that the system-specific security requirements and other applicable security requirements are met. For technical milestones of Programme components, Agency staff allocated to the SAB are supporting the SAB in examining the security features of the system (according to the predefined scopes of each milestone) to verify compliance to security requirements, that the system is sufficiently secure to allow EU Classified Information to be processed by it, and that the service authorisation can be maintained.
- **Independent security assessments and audits:** the staff allocated to the SAB coordinates security assessments and audits to verify the security posture of the system and in particular the status of the cyber measure implementation;
- **Ground station level activities:** staff allocated to the SAB conduct security audits and assessment of sites against security requirements, in collaboration with LSAA (Local Security Accreditation Authority).
- **Authorisations of bodies to develop or manufacture sensitive technology:** staff allocated to the SAB provide administrative support to the process of SAB authorisation of bodies, such as – in the

case of Galileo- for developing and manufacturing sensitive PRS technologies, PRS receivers or PRS security modules.

III.02.01.02 Objectives, Indicators, Expected Outcomes and Outputs

Annual Objective 1 Implemented by	Operate effective administration of the SAB so as to support timely decision making			
	SAB Secretariat (WBS 2.04.01)			
	Expected Results	<ul style="list-style-type: none">• Reporting to SAB chairman• SAB meeting plan proposed in coordination with the Programme to anticipate possible milestones• Distribution of working papers in due time before each meeting• Establishment of minutes in due time after each meeting• Administrative written procedures as necessary• Record and transmit all SAB decisions		
Status		Objective continues from last financial year		
Indicators		Result 2020	Target 2022	Means & frequency of verification
Successful implementation of required administrative processes.		100%	100%	Quarterly Review
Outputs relating to the multi-annual work programme objectives:				
<ul style="list-style-type: none">• Up-to-date register of SAB actions and decisions• SAB minutes of meeting• Yearly SAB meeting plan• SAB Statements• Archive of Accreditation Statements• Up-to-date register of SAB membership				
Other outputs:				
<ul style="list-style-type: none">• Recommendations to SAB / SAB chairman				

Annual Objective 2	Support to SAB management			
Implemented by	SAB Management (WBS 2.04.02)			
Expected Results	<ul style="list-style-type: none"> • SAB relevant part of the multiannual work programme (including financial and human resources) adopted and provided to Administrative Board on time • SAB relevant part of the annual work programme (including financial and human resources) adopted and provided to Administrative Board on time • SAB relevant part of the annual report on activities adopted and provided to Administrative Board on time 			
Status	Objective continues from last financial year			
Indicators	Result 2020	Target 2022	Means & frequency of verification	

SAB relevant part in the multiannual work programme provided to SAB for approval by established deadline	yes	yes	SPD/CAAR process compliance
SAB relevant part in the annual work programme provided to SAB for approval by established deadline	yes	yes	
SAB relevant part in the annual report provided to SAB for approval by established deadline	yes	yes	
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> SAB Work Programme SAB annual activity report 			

Annual Objective 3 Implemented by Expected Results	To provide all authorisation statements needed by the Programme and approved by SAB			
	Security Accreditation Statements (WBS 2.04.04)			
	User Segment Security Assurance (WBS 2.05.04)			
	<ul style="list-style-type: none">• Approvals of satellite launches			
	<ul style="list-style-type: none">• Authorisations to operate the systems set up under the components of the Programme or the elements in their different configurations and for the various services they provide, up to and including the signal in space.			
	<ul style="list-style-type: none">• Authorisations to operate the ground stations			
	<ul style="list-style-type: none">• Authorisations of bodies to develop and manufacture sensitive technologies			
Status	<ul style="list-style-type: none">• Security accreditation statements			
	<ul style="list-style-type: none">• Changes to existing security accreditation statements			
	<ul style="list-style-type: none">• Re-accreditation statements			
	Objectives continue from last financial year			
	Indicators	Result 2020	Target 2022	Means & frequency of verification
	All SAB statements provided to Programme Management within two weeks after decision.	100%	100%	Quarterly review
All authorisations of bodies processed	100%	100%		
Outputs relating to the multi-annual work programme objectives:				
<ul style="list-style-type: none">• Approval to launch• Authorisations to operate the system in its different configurations and services• Authorisation to operate the ground stations• Authorisation of bodies to develop and manufacture sensitive technologies• Various accreditation statements				

Annual Objective 4 Implemented by	Ensure management of the Panel and expert groups contributing to it		
	Panel Management (WBS 2.05.05)		
	<ul style="list-style-type: none">Propose meeting planOrganise meetings throughout the yearPreparation for technical discussion in each meetingMoM approved for each meetingDeliver accreditation recommendations from the subordinate body to SAB		
	Expected Results		
Status	Objective continues from last financial year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
<ul style="list-style-type: none">Successful implementation of required administrative processes.	100%	100%	Quarterly Review
<ul style="list-style-type: none">Minutes of meeting submitted for approval at each meeting or immediately after.	100%	100%	
<ul style="list-style-type: none">Outcomes of each meeting reported to each SAB.	100%	100%	
<ul style="list-style-type: none">All accreditation milestones and other decisions in SAB Agenda, in need of security risk assessment, addressed by the Panel	100%	100%	
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none">Security accreditation recommendations from the Panel to the SABBriefing to SAB and SAB chair on the outcome of the Panel			

Annual Objective 5	Ensure independent assessment of system level security		
Implemented by	System Security Assurance (WBS 2.05.01) Ground Site Security Assurance (WBS 2.05.02) Component Security Assurance (WBS 2.05.03)		
Expected Results	<ul style="list-style-type: none"> Carry out independent security assessments and system audits/reviews and report to subordinate body and SAB Participate in programme reviews at system level and, where necessary, ad hoc participation in segment reviews Monitor risks and treatment plans and report to subordinate body and SAB If requested by the SAB, review existing strategies to ensure consistency with the regulation/ programme and propose enhancements as appropriate 		
Status	Objective continues from last financial year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
<ul style="list-style-type: none"> Participation to system Programme reviews when invited by the Programme. 	80%	80%	Quarterly Review
<ul style="list-style-type: none"> Organisation of independent security vulnerability tests and/or system audits allocated to SAB secretariat. 	As requested	As requested	

Outputs relating to the multi-annual work programme objectives:

- Recommendations to SAB

Annual Objective 6 Implemented by	Assurance for programme keys (flight keys and Galileo PRS)				
	SAB Crypto Distribution Authority Activities (WBS 2.06)				
	<ul style="list-style-type: none">• Propose meeting plan for the special subordinate body representing the Member states• Organise meetings throughout the year• Preparation for technical discussion in each meeting• MoM approved at each meeting• Deliver accreditation recommendations from the subordinate body to SAB				
	Expected Results				
Status	Objective continues from last financial year				
Indicators		Result 2020	Target 2022	Means & frequency of verification	
• Successful organisation of meetings following SAB instruction		N/A	2	Quarterly Review	
• Successful implementation of required administrative processes		100%	100%	Quarterly Review	
• Minutes of meeting submitted for approval at each meeting		100%	100%	Quarterly Review	
• Outcomes of each meeting and recommendations reported to each SAB		100%	100%	Quarterly Review	
• Timely execution of tasks related to flight key assurance per each launch campaign		N/A	2 launch campaigns	Annual	
Outputs relating to the multi-annual work programme objectives:					
<ul style="list-style-type: none">• Assurance statements to SAB meetings• Recommendations to the SAB and/or SAB Chair					

Annual Objective 7	Prepare for the SAB regulatory responsibilities on Copernicus, GOVSATCOM and SSA			
Implemented by	SAB Management (WBS 2.04.02) Security Accreditation Strategy (WBS 2.04.03)			
Expected Results	Plan for the accreditation activities for the three new components (Copernicus, GOVSATCOM, SSA). Progressively initiate the accreditation activities for Copernicus, GOVSATCOM, and SSA, in order to integrate them in the implementation as per Objectives above.			
Status	Objective continues from last financial year			
Indicators	Result 2020	Target 2022	Means & frequency of verification	
Plan for initial accreditation activities for Copernicus, GOVSATCOM, and SSA in compliance to the SAB processes	N/A	yes	Annual review	

Outputs relating to the multi-annual work programme objectives:

- Contact network with main security stakeholders and security bodies active in Copernicus, GOVSATCOM, and SSA
- Draft and management of relevant accreditation documents (e.g. Security Accreditation Strategy) needed for the accreditation of Copernicus, GOVSATCOM, and SSA
- Maintenance of the plan for initial accreditation activities for Copernicus, GOVSATCOM, and SSA
- Informative points relevant to the accreditation of the three components inserted in the SAB Agenda, with related preparation of slides/notes
- First accreditation activities initiated, as requested

III.02.02 OPERATIONAL SECURITY OF EGNSS COMPONENTS (VARIOUS WBS)

III.02.02.01 Overview of the Activity

The EU Space Programme Regulation states (Art. 34) that the entity responsible for the management of a component of the Programme shall be responsible for the operational security of that component and shall, to that end, carry out risk and threat analysis and all the necessary activities to ensure and monitor the security of that component, in particular setting of technical specifications and operational procedures, and monitor their compliance with the general security requirements of that component. For Galileo and EGNOS that entity shall be the Agency.

It has to be noted that similar activities for the EU GNSS components have been already undertaken by the Agency in the previous MFF, in particular under delegation from the European Commission.

III.02.02.02 Objectives, Indicators, Expected Outcomes and Outputs

Annual Objective 1	Galileo Threat and Risk analysis
Implemented by	Security Accreditation (WBS 4.04.11)
Expected Results	<ul style="list-style-type: none"> • Maintain the Galileo Services and System Security Plan registering, for the system and service milestones: <ul style="list-style-type: none"> ○ Risk and threat analyses ○ Identified security risks ○ Identified treatment plans and status of implementation ○ • Maintain the Galileo Security Accreditation Milestones and Schedule • Assessment of security risks associated with the Galileo system, its operations and services delivery • Report the status of the security risks and the required mitigations to the relevant Galileo Management Boards and bodies proposing risk management actions

		<ul style="list-style-type: none"> Prepare, deliver and report on the accreditation files to the Security Accreditation Board (SAB) and its subordinate bodies to obtain the required authorisations and maintain the security accreditation certificates as per the regulation. 		
Status		New objective related to new core task		
Indicators		Result 2020	Target 2022	Means & frequency of verification
Security Risk analysis and identification for the Galileo Programme milestones delivery to SAB for decision		N/A	100%	SAB meetings (4 per year) and as required
Galileo Services and System Security Plan		N/A	100%	Quarterly
Galileo Security Accreditation Milestones and Schedule		N/A	100%	Quarterly
Outputs relating to the multi-annual work programme objectives:				
<ul style="list-style-type: none"> The Galileo Services and System Security Plan The Galileo Security Accreditation Milestones and Schedule 				

Annual Objective 2		Galileo Operations Security		
Implemented by		Service Provision Security (WBS 4.04.14)		
Expected Results		<ul style="list-style-type: none"> Monitor the status of implementation of the applicable high-level security requirements Monitor and track the implementation of the identified treatment plans for the system in operations Ensure security oversight of Galileo operators Ensure Cyber Security governance (Cyber Security Manager and Cyber Internal Auditor activities) 		
Status		New objective related to new core task		
Indicators		Result 2020	Target 2022	Means & frequency of verification
Number of Service Exploitation Reviews – security sessions		N/A	2	Bi-annual
Number of QSPR on GSOp – review of implementation reports		N/A	4	Quarterly
Outputs relating to the multi-annual work programme objectives:				
<ul style="list-style-type: none"> Service Exploitation Reviews – security sessions: report on implementation status of requirements 				

Annual Objective 3	EGNOS Threat & Risk analysis
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Implemented by	Mission Level Security Management, Systems and Site Security (WBS 3.06.01, 3.06.02, 3.06.07) - EGNOS V2 in Operation, EGNOS V3 under development		
Expected Results	<ul style="list-style-type: none"> Maintain the EGNOS Services, System and Sites Security Plan registering for the system and service milestones: <ul style="list-style-type: none"> Risks and threat analysis (V2+V3) Identified security risks (V2+V3) Identified treatment plan and status of implementation (V2+V3) Site Accreditation Review (SAR) Maintain the EGNOS Security Accreditation Milestones and Schedule (SAMS V2 & V3) Management of security risks associated with the operations and service delivery (V2) Report to the EGNOS Management Boards and bodies the status of the security risks and the required mitigations Prepare, deliver and report on the accreditation files to the Security Accreditation Board (SAB) and its subordinate bodies to obtain the required authorisations as per regulation (V3 & V2) 		
Status	New objective related to new core task		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Number of accreditations Data packages prepared over the number of expected accreditation milestones	N/A	100 %	SAB meetings (4 per year) and as required
EGNOS V3 Services and System Security Plan (including sites)	N/A	100 %	As required
EGNOS V3 Security Accreditation Milestones and Schedule	N/A	100%	Quarterly
EGNOS V3 Sites SAR	N/A	100%	See in SAMS V3
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> The EGNOS Service Evolution Plan – SEP The EGNOS V2 and V3 Services and System Security Plan The EGNOS V2 & V3 Security Accreditation Milestones and Schedule 			

Annual Objective 4	EGNOS Operations Security		
Implemented by	Service Provision Security (WBS 3.06.03)		
Expected Results	<ul style="list-style-type: none"> Ensure implementation and follow up of the EGNOS SMP at programme and Service Provision contracts level Ensure security oversight of the GEO and EGNOS Service Providers contracts activities in the field of security Ensure security incidents raised by the Services Providers for the part concerning the Agency (impacts on the programme, report to EC) are managed 		
Status	New objective related to new core task		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Number of Service Exploitation Reviews – security sessions (EC/Agency QPM)	N/A	100%	The reviews are held quarterly, together with the Commission.

Number of EGNOS Service Provider Reviews – security sessions	N/A	100%	Monthly Meeting (SPMR) + one Annual Meeting (ASPR)
Number of EGNOS GEO Service Providers Reviews – security sessions	N/A	100%	3 per year in the initial phase then 2 per year
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> • Service Reviews – security sessions • Service Provision Reviews – security sessions 			

III.02.03 OPERATION OF THE GALILEO SECURITY MONITORING CENTRE (WBS 4.06)

III.02.03.01 Overview of the Activity

In 2022, the Agency will ensure the continuity of GSMC's operations, and in-line with the Service Level Agreement.

The Agency will upgrade the GSMC service capability based on the system capability associated with the GSF, the SECMON programme delivery and the GRON programme delivery, including their deployments and upgrades in the GSMC back-up site in Spain. Regarding hosting in France and Spain, both sites are progressing in their ramp-up towards final sites configurations.

III.02.03.02 Objectives, Indicators, Expected Outcomes and Outputs

The Agency has defined strategic objectives for the GSMC.

Annual Objective 1	Ensure that Galileo services and operations are secure
Implemented by	Operations (WBS 4.06.01)
Expected Results	<p>Operations, expertise and analysis:</p> <ul style="list-style-type: none"> • <u>Security and system status Monitoring</u>: monitor system security and health, detecting, containing, investigating and reacting to security incidents (System Incident Management) • <u>PRS access management</u>: enable access to PRS to authorised stakeholders, in compliance with PRS access rules (including the Common Minimum Standards) within the limit of the system design. Manage the lifecycle of PRS access in order to assure service continuity, including through service support and secure communication interfaces.

	<ul style="list-style-type: none"> • <u>Cyber Security Management</u>. Galileo vulnerabilities management by consolidating the cyber vulnerabilities present in the Galileo operational systems, linking them to the current threat landscape (i.e. threat intelligence) and monitoring their lifecycle until their effective correction • <u>Crisis management</u>: specific activities and configuration of the GSMC to respond to the needs and requirements of a crisis affecting the Galileo system, including supporting any Council Decisions (CD 2021/698). This will be activated only under specific conditions. • <u>IT OPS Sysadmin support</u>: Ensure on-going L1 maintenance of the IT operational and validation systems in both GSMC sites (FR and ES). Support to configuration and asset management, escalation to Level 2, and liaison with Supporting ICT systems.
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Status			
Indicators	Result 2020	Target 2022	Means & frequency of verification
Incident handling/defined SLA	Restricted	Restricted	GSMC monthly report
PRS access service within agreed response time	Restricted	Restricted	GSMC monthly report PRS SER (per semester) PRS Security message monthly report once the functionality is provided with IOC/FOC
PRS operations contingency plans rehearsal	Restricted	Restricted	Yearly
GSMC availability	Restricted	Restricted	GSMC monthly report
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> • System status and security monitoring: incident handled, escalation of Member States or to CD 2021/698, resolution of security incident, assessment of vulnerabilities and recommendations, security reports, anomalies and requests for change/deviation/waiver, Service Level Agreement chart • PRS access management: availability of PRS access, workarounds, PRS security reports (incl. security message reports), Notification to Galileo Users, anomalies and requests for change/deviation/waiver, Service Level Agreement chart, PRS contingency plans. • Crisis management: Council Decision (JA) instructions implementation report, Notification, Council Decision assessment report, Acknowledgement of the cancellation of a Council Decision. • Security Expertise and Analysis. • Operations: service validation campaigns execution and reports, IT OPS systems availability, local operations procedures development and implementation. 			

Annual Objective 2	Ensure Engineering activities in support of deployments and operations
Implemented by	Engineering (WBS 4.06.02)
Expected Results	<ul style="list-style-type: none"> • Service and requirement management: <ul style="list-style-type: none"> ○ Maintenance of the applicable baseline (Concept of Operations) ○ Identification, analysis and flow-down of requirements that could impact the GSMC. ○ Ensure on GSMC compliance with programme requirements. • System operations and supporting activities engineering: <ul style="list-style-type: none"> ○ Design and validate new procedures, support to the operations, as well as the related business continuity plans.

- Train and Certify operators for the new GSF/SOIF/SECMON equipment.

- **Technical engineering:**
 - Identify and define the processes, methods, tools and logic of system development activities, including maintenance and support capabilities for the two sites.
 - Manage the lifecycle of the technical processes that lead to the in-production setting of new technical supporting assets and processes.
 - GRON deployment, qualification and accreditation of GRON.
 - Configuration Management: through the CMDB implemented at GSMC, following configuration management, maintaining configuration status accounting and performing configuration audit.
- **Site and system security accreditations:**
 - Design of the security framework, preparation of the security accreditation documents for the new sites/systems and maintenance of the security accreditation for the existing systems.
 - Implementation of Security Operations (SECOPs) for Communication Information System (CIS) monitored and systems audited.

Status

Indicators	Result 2020	Target 2022	Means & frequency of verification
% of success rate of operator training (certification)	100%	100%	Certification reports
Percentage of data-packs timely released for accreditation requests (new or renewals) against annual plan baseline schedule	100%	100%	Contribution to reporting on a monthly basis, both internally and to the Commission; EUSPA quarterly review.

Outputs relating to the multi-annual work programme objectives

- Requirement management: service level management, statement of compliance with SSRS
- Engineering: validation reports, overall catalogue of operations procedures, anomalies, change requests
- Technical engineering: new catalogue of maintenance procedures, anomalies, change requests
- Hosting engineering: lead in follow-up of new buildings deployments by France and Spain. Establish requirements for upgrades or changes to existing infrastructure as necessary for deployment of operational IT systems or hosting availability. Contribute to monitoring or validating the implementation of such changes.
- Site and system security accreditation:
 - Security Risk Analysis, CIS and sites security accreditation data-pack followed by Authorisation to Operate, security accreditation plan updated, SECOPs maintained, periodic audit reports
 - Access granted or denied to staff, staff security briefed.

Configuration Management:

- A CMDB that ensures the process for establishing and maintaining consistency of GSMC systems performance, functional, and physical attributes with requirements, design, and operational information overtime.

Annual Objective 3	Ensure the availability of Hosting Services
Implemented by	Hosting management (WBS 4.06.03)

Expected Results	Hosting management: prepare for, ensure and maintain technical operations support to provide site hosting and equipment necessary for the core missions of the GSMC and its staff. Provide a continuity of hosting services through building maintenance and extra request management related to the evolution of the facilities and IT: <ul style="list-style-type: none">➤ Facilities management (Hosting Services).		
	<ul style="list-style-type: none">• Ensure the provision of uninterrupted hosting services of GSMC sites (Facility maintenance, technical support, obsolescence management, logistics and ancillary support).		
	<ul style="list-style-type: none">• Maintain GSMC dual site capability.		
	<ul style="list-style-type: none">• Renovation (obsolescence treatment and rescoping) for EUSPA needs of the Building 123 in GSMC-FR.		
	<ul style="list-style-type: none">• Final configurations buildings constructions: support structural works and accreditation processes in order to reach GSMC-FR long term extension and GSMC-ES Final configuration building delivery in accordance with programme objectives.		
Status			
	Result 2020	Target 2022	Means & frequency of verification
<ul style="list-style-type: none">• Final Configuration (GSMC-FR)	Construction started as planned, SDR achieved	TEC SAR and SEC SAR milestones achieved	CP/Review board successful
<ul style="list-style-type: none">• Final Configuration (GSMC-ES)	Delayed	Delivered	
Outputs relating to the multi-annual work programme objectives:			
Hosting management:			
<ul style="list-style-type: none">• Building extension at GSMC-FR completed in 2022, with support to staff and systems relocations in 2023.• Joint GSMC/FR MOD maintenance provider management of GSMC-FR Extension.• GSMC-FR current building: Renovation plan agreed by early 2023, done within 12 months after transfer of Galileo operations in Extension building.• Joint GSMC/ES MOD maintenance provider management of Final configuration at GSMC-ES after move of equipment and staff in 2022.			

Annual Objective 4	Ensure continuity of service of GSMC operations, continuous improvement, quality and efficiency
Implemented by	Management (WBS 4.06.04)

Expected Results	Management of the organisation and communication: <ul style="list-style-type: none">Organise activities to ensure the GSMC milestones are achieved on time using available resources while also ensuring the reliability of information and its timely disseminationLead the organisation by providing a clear strategy			
	Integrated Management System and Product Assurance: <ul style="list-style-type: none">Guarantee maintenance of the Agency ISO 9001 certification, including adaptation to ISO 9001 evolutionsCoordinate PA/QA RAMS activities related to EC-EUSPA Delegation/Contribution Agreements in line with GSOp, GSC and GRC requirementsSupport the activities of the ARB, NRB, and CCB			
	Risk and business continuity and disaster management: <ul style="list-style-type: none">Risk management: identify potential risks that could impact the proper functioning of the Galileo programme and undertake relevant actions to mitigate those risksBusiness continuity and disaster: in case of service breach, ensure availability and continuity of services in a reduced functionality mode			
	Health and safety management: <ul style="list-style-type: none">Implement EUSPA policy relating to health and safety at work, provide and maintain a safe work environment for staff, visitors and contractors			
	Resolution and continuous improvement management: <ul style="list-style-type: none">Ensure that problems and actions for improvement are identified and handled until the business cases are delivered to the Change Approval Board for implementation and/or the non-conformance is solved			
Status				
Indicators		Result 2020	Target 2022	Means & frequency of verification
• Management: Monthly/quarterly report released per year		12 monthly reports; 4 quarterly reports.	12 monthly reports; 4 quarterly reports.	GSMC monthly report and QIR (Quarterly Implementation report)
• Quality: percentage of audit performed/planned		100%	100%	Agency quarterly review
• Business Continuity plan update 1/year		Two/year	Two/year	Yearly update
Outputs relating to the multi-annual work programme objectives ¹⁸ :				

¹⁸ This excludes any activities on the new back-up site

- Management of the organisation and communication: planning execution, budget metrics
- IMS: ISO 9001 certification
- Health and safety management: Document Unique d’Evaluation des Risques professionnels, Plan de prévention (according to French regulation)
- Risk and business continuity disaster management:
 - Risks are monitored and controlled
 - GSMC business continuity plan updated and tested
- Resolution of anomalies and continuous improvement: Anomalies (problems) and NCR solved, effective PA organisation, service evolution roadmap

Annual Objective 5 Implemented by	Ensure local security on GSMC sites Security (WBS 4.06.06)		
	<p>1. Security: Prepare, ensure and maintain the local security needed to protect EU classified information and assets present on site.</p> <p>a. [Registry control management]: handling and storage of classified documents, management of classified document registry, ensuring the timely on- and off-site EUCI back-ups, briefings on EUCI handling and storage. Preparation of operators RCO certification trainings.</p> <p>b. [Local security management]: Ensure personnel and physical security including facilities, activities and information; management of guarding support, coordination with national and local authorities. Auditing activities. Briefings on security awareness.</p> <p>c. [Local Informatics Security (LISO)]: ensuring compliance with the security operating procedures, and reporting any discrepancies or incidents related to their implementations.</p>		
Expected Results	<p>2. [COMSEC management and crypto management and operations]: Manage COMSEC/crypto procedure evolutions and validations. Ensure reception, preparation and shipment of crypto items to or from crypto accounts and users, destroying crypto material, performing Crypto Operations related to PKI, non-PRS keys and SINA VPN management, SPECTRA and regulatory inventories and audits.</p> <p>3. [INFOSEC (Local Informatics Security Officer)]: overall management of security of the GSMC communications and information systems, maintains an overview of the information security risk management process and of the development and implementation of information system security plans, reports on IT security, identify shortfalls and improvements, advise the GSMC manager on the security-related issues.</p>		
Status			
Indicators	Result 2020	Target 2022	Means & frequency of verification
<ul style="list-style-type: none">[Registry Control MGT]: receipt, dispatch, storage, destruction of classified documents and tracking of their lifecycle	100%	100%	Reported to GSMC management monthly and yearly

<ul style="list-style-type: none"> • [Local Security MGT]: New or leaving staff/contractors/visitors, need to issue and renew the security clearance 	100%	100%	
<ul style="list-style-type: none"> • [COMSEC MGT]: new access requested, need to transfer COMSEC items, new COMSEC item, crypto operations (PKI, non-PRS keys, SINA VPN management, SECTRA) 	100%	100%	
<ul style="list-style-type: none"> • [Crypto Account MGT]: receipt, dispatch, storage, destruction of crypto materiel, need to execute the key management plan 	100%	100%	Annual EUCI report
<ul style="list-style-type: none"> • [LISO MGT]: Communication and information systems SecOps, the Cyber, the GSMC SecOps and OSRD requirements, the reports from authorized users, the systems logs, users access requests. 	100%	100%	Annual audit reports
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> • Registry control management: <ul style="list-style-type: none"> ○ Up-to-date registry¹⁹ (successfully audited) ○ Classified information managed according to procedures – incidents managed ○ Staff EUCI briefed ○ EUCI backed up (on- and off-site) • Local security management: <ul style="list-style-type: none"> ○ Staff security briefed ○ Supervision of RCO functioning through regular audit • Local informatics security <ul style="list-style-type: none"> ○ Staff and consultant authorisation to access systems ○ Validation of access rights • Management of physical security of the site COMSEC and crypto management: <ul style="list-style-type: none"> ○ Up-to-date account registry (successfully audited) ○ Transportation plan executed ○ Crypto assets and keys managed according to procedures – incidents managed ○ Key and certificates timely renewed 			

¹⁹ Regarding CONFIDENTIEL UE/EU CONFIDENTIAL or SECRET UE/EU SECRET.

III.02.04 PUBLIC REGULATED SERVICE (PRS) ACTIVITIES

III.02.04.01 Overview of the Activity

The Agency will continue to carry out PRS activities entrusted to it by the PRS Decision 1104/2011/EU. These include:

- Implementing the arrangement concluded between the European Commission and the Agency pursuant to Article 14(c) of Decision 1104/2011/EU. This includes the implementation and maintenance of all tasks (e.g. handling of PRS information and PRS items, risk analysis, internal auditing, etc.) the Agency is required to perform²⁰ to ensure compliance with the PRS framework.
- The implementation and maintenance of the Agency's functionalities, development of relevant processes and tools and maintenance of required infrastructure (e.g. tools) to enable the Agency to perform those tasks that can be entrusted to it by virtue of Article 5 (in particular, 5.1.(b), 5.1.(c), 5.9) of the PRS decision²¹.

In 2019, the Agency carried out an analysis of the activities that it may need to perform for the access to PRS and the handling of PRS items for the purpose of its mandate, and/or activities to provide technical assistance to CPAs in performing their tasks. On the basis of this analysis the Agency's internal organisational structure has been defined to support implementation of the related activities.

The first implementation of such a new organisation, required to allow the Agency to manage the access to the PRS in compliance with the Arrangement pursuant Article 14(c) of Decision 1104/2011/EU has happened in 2020.

At the time of writing, the Agency is finalising with the Commission the Use Cases for which the Agency needs to handle PRS items and/or access PRS pursuant Article 14(c) of Decision 1104/2011/EU.

²⁰ The provisions set out in the Arrangement concluded between the EC and the Agency pursuant to article 14(c) of Decision 104/2011/EU shall be enforced for both core operations (e.g. Accreditation, GSMC) and any delegated activity related to the PRS.

²¹ The cost of functioning is not part of the Agency's expenses.

III.02.04.02 Objectives, Indicators, Expected Outcomes and Outputs

Annual Objective 1 Implemented by	Implementation of PRS Article 14c arrangement			
	Manage the implementation of Article 14c (WBS 2.03.06)			
	This objective includes all activities related to managing the implementation of the EC-Agency arrangement pursuant to Article 14(c) of the PRS Decision, in particular regarding the different reporting streams, compliance checks and associated risk assessments. This objective also implements the provisions related to the Agency’s access to, use and ownership of PRS information, PRS technology and PRS items. This activity includes: <ul style="list-style-type: none">• Preparing and maintaining the PRS management plans (Access to PRS General Management Plan, PRS Management Plan (PMP) and the related PRS information management plan (PIMP) and PRS key management plan (KMP)) defining the organisational structure and the rules for implementing the management of PRS items, PRS technology and PRS information• Reviewing the Article 14(c) arrangement (if required)• Preparing Article 14 quarterly implementation reports and delivering them to the Commission• Carrying out regular inspections of the departments within the Agency dealing with PRS items and PRS classified information• Supporting regular risk assessments• Analysing those activities requiring the processing of PRS items and PRS information to ensure compliance with Article 14(c) arrangement• Maintaining PRS items and PRS information database and drafting a report summarising movements, requests and security breaches associated with the PRS items/PRS information under the responsibility of the Agency			
Expected Results				
Status	This objective continues from the previous years. A new and updated set of PRS management plans (and related processes) has been prepared and adopted. The set of documents defines the basis for the set-up and implementation of the Agency’s internal organisation for the management, the handling and use of PRS items by the Agency. An authorisation request to activate those functions by the Agency has been sent to Commission in 2020 in compliance with the Article 14(c) arrangement.			
Indicators	Result 2020	Target 2022	Means & frequency of verification	
Timely review of PRS management plans (and related processes)	1/year	1/year	Up-to-date PRS management plans made available annually; Agency quarterly review	
Level of compliance to Article 14	C: 94% PC: 6% NC: 0%	C:95% PC ²² :5% NC:0%	Audit reports; Agency quarterly review	
Outputs relating to the multi-annual work programme objectives:				
<ul style="list-style-type: none">• Quarterly Article 14 implementation report sent to the Commission				

²² The residual partial compliance is mainly due to dependencies from actors external to the Agency.

III.02.05 COMMUNICATION, PROMOTION AND MARKETING OF THE SERVICES (WBS 5.02, 5.03, 1.03.01)

III.02.05.01 Overview of the Activity

As in past years, the Agency will continue to stimulate demand for EGNSS working on market uptake across user communities and engaging the entire value chain, fostering the competitiveness of EU industries and SMEs.

A further effort will be made to foster Galileo differentiators, such as multi frequency capability, Search and Rescue (SAR) services already operational, OS-Navigation Message Authentication (NMA) and High Accuracy Service and Commercial Authentication Service (CAS).

The agency will analyse EU GOVSATCOM requirements leveraging the User Consultation Platform with GOVSATCOM representatives of EU Member States and EU Agencies in support of the needed policy instruments by the European Commission. In addition, a preliminary adoption roadmap for integrated governmental services leveraging relevant components of EGNSS, Copernicus and GOVSATCOM will be defined.

The main activities are:

- In every vertical market segment (i.e. Aviation and Drones, Road and Automotive, Rail, Maritime and Inland Waterways, Insurance & Finance etc.):
 - Engage key actors in the value chain and users in priority markets to ensure continuous increase in EGNSS adoption fostering synergies with Copernicus and GOVSATCOM;
 - Support the Commission with on-going EGNSS, Copernicus, and GOVSATCOM related regulatory applications and new legislative initiatives within the framework of the new Space Programme Regulation.
- Horizontally:
 - Continue to provide market and technology monitoring, including socio-economic benefits and cost-benefit analysis, as the main tools for making strategic decisions;
 - In cooperation with the Commission, manage the User Consultation Platform transversal to different space programme components and market specific user consultation groups;

- Monitor EGNSS user satisfaction and performance;
- Continue to translate user needs into requirements and inputs for new services development and new data usage via careful monitoring of user communities and emerging trends in complementary and substitute technologies;
- Leverage the GSC as a key every-day user interface;
- Provision of education and training activities, if justified to support the market uptake activities.

EUSPA performs new core tasks:

- Following a Copernicus dedicated market segment approach that will be integrated and harmonised with the EGNSS one maximizing the synergies among the programme components;
- Focusing on “Other Copernicus Users”, especially commercial and private bodies, charities, NGOs and international organisations that are not directly targeted by the Core Users of Copernicus;
- Fostering the market development of the Other Copernicus Users in close cooperation with the other Copernicus entrusted entities and their related activities;

Communications will continue to support market development both in its vertical (segment by segment) activities and horizontally, as well as support all awareness raising and outreach activities targeting: stakeholders (including the European Commission and the European Parliament), industry and SMEs, R&D community and the general public. These include:

- Production of editorial content (PR, stories, social media posts, and ad hoc content), visual and multimedia content (graphics, photos, animations, videos);
- Website development and management and social media management;
- Event coordination.
- Press activities

New activities will include the harmonisation of the communication and market development of Copernicus with the other EUSPA entrusted tasks on user uptake and applications development.

III.02.05.02 Objectives, Indicators, Expected Outcomes and Outputs

Annual Objective 1	Increase adoption in the Aviation and Drones sector by building on user needs and providing feedback for improvement of services		
Implemented by	<ul style="list-style-type: none"> EU space programme components market development in aviation and drones (WBS 5.02.05 and 5.03.05) 		
Expected Results	<ol style="list-style-type: none"> Aviation and drones market and user technology understood and fully analysed and Aviation and drones user needs updated and analysed Penetration of EGNOS/Galileo in receiver models for aviation and drones ²³ Support to aviation and drones companies commercialising EGNOS/Galileo products Technical support, and CBA to airports/heliports, Air Navigation Service Providers (ANSP), airspace users on implementing LPV/LPV 200/PinS/RNP 0.3, in support of the implementation of EU Regulation 2018/1048, which lays down airspace usage requirements and operating procedures concerning performance-based navigation and towards an integrated CNS strategy Demonstrate EGNOS/Galileo's added value for drones operations and U-Space and integrate differentiators (e.g. OS-NMA) in receivers/UTM (navigation, surveillance, combination with other technology) EGNOS and Galileo user satisfaction survey completed Preliminary roadmap designed for the adoption of Copernicus data in aviation and drones (e.g. the improvement of air traffic management, turbulences impact in route and approaches, airport infrastructure planning and operations management, Search and rescue) contributing to the priority ecosystem "Mobility-Transport-Automotive". 		
Status	This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. Galileo prototype receivers for navigation in aviation	1	3	Technology monitoring process; yearly review
3. a) Number of companies commercialising EGNOS/Galileo products	130	150	Use Galileo listed products (including EGNOS and Galileo); yearly review

²³ Analysis based on internal GSA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. a) Annual tracking of EGNOS based procedures	728	820	Regular monitoring; quarterly review
b) Annual tracking of EGNOS capable airlines and avionics	69	90	Regular monitoring; quarterly review
5. Penetration of EGNOS and Galileo in drone receiver models and added value demonstrated	30%	35%	Regular monitoring; quarterly review
6. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>60% of respondents "very satisfied"	>60% of respondents "very satisfied"	Annual report on survey; quarterly review
7. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
<ol style="list-style-type: none"> Aviation and drones section of the market report published in 2021/2023 and technology report published in 2022 and Report on aviation and drone user needs and requirements updated Report on Galileo penetration in aviation and drone receivers <ol style="list-style-type: none"> Industry database for aviation Coordinated work plans to foster EGNOS and Galileo in aviation with key stakeholders: EASA, SESAR JU, SESAR Deployment Manager (SDM) <ol style="list-style-type: none"> EGNOS approach procedures Report on Galileo and EGNOS penetration in EU airspace users, report on available avionics Updated list of receivers with EGNOS and Galileo for drones published on Galileo websites and report on demonstrations. Results of User Satisfaction surveys Preliminary adoption roadmap of Copernicus use in Aviation and Drones, contributing to the priority ecosystem "Mobility-Transport-Automotive". 			

Annual Objective 2

Increase adoption in Road and Automotive segment by building on user needs and providing feedback for improvement of services

Implemented by

EU space programme components market development in road (WBS 5.02.04 and 5.03.04)

Expected Results	<ol style="list-style-type: none"> 1. Road and automotive market and user technology understood and fully analysed and needs updated and analysed 2. Penetration of Galileo in road chipsets and automotive brands²⁴ 3. Support to road and automotive companies commercialising Galileo products 4. Strategic partnership of EUSPA with key groups of road and automotive stakeholders 5. Technical support (including plan and testing) to smart (digital) tachograph industry for EGNSS adoption, in cooperation with the Joint Research Centre (JRC) 6. Implementation of standardisation/certification process in Cooperative Intelligent Transport Systems (C-ITS) and autonomous vehicles, in cooperation with EC 7. Implementation of the adoption roadmap in autonomous driving 8. EGNOS and Galileo user satisfaction survey completed 9. Preliminary roadmap designed for the adoption of Copernicus data in congestion charging and traffic management applications, contributing to the priority ecosystem "Mobility-Transport-Automotive". 		
	Status This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo penetration in automotive brands (assuming 100 automotive brands represent 99.9% of the worldwide production)	32%	50%	Technology monitoring process; yearly review
3. a) Number of companies commercialising Galileo products	130	160	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Number of partnerships with key road organizations	2	4	Regular monitoring; yearly review
5. Number of smart (digital) tachograph models with OSNMA tested, in cooperation with JRC	0	3	Regular monitoring; yearly review
6. % development of standardisation/certification procedures for GNSS in C-ITS	20%	50%	Regular monitoring; yearly review

²⁴ Analysis based on internal GSA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

and autonomous driving functions			
7. Car makers commercializing autonomous vehicles models with Galileo	0	3	Regular monitoring; yearly review
8. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>60% of respondents "very satisfied"	>60% of respondents "very satisfied"	Annual report on survey; quarterly review
9. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
<ol style="list-style-type: none"> 1. Road and automotive section of the market report published in 2021/2023 and technology report published in 2022 and Report on road and automotive user needs and requirements updated 2. Report on Galileo penetration in road chipsets and automotive brands 3. Industry database for road and automotive 4. Membership or MoU with road and automotive organizations 5. Test plan and testing campaigns 6. Draft standards for C-ITS and autonomous driving applications 7. Adoption roadmap for autonomous vehicles 8. Results of User Satisfaction surveys 9. Preliminary adoption roadmap of Copernicus use in congestion charging and traffic management, contributing to the priority ecosystem "Mobility-Transport-Automotive". 			

Annual Objective 3	Increase adoption in Maritime & Inland Waterways segment by building on user needs and providing feedback for improvement to services
Implemented by	EU space programmes components market development in Maritime & Inland Waterways (WBS 5.02.02 and 5.03.02)
Expected Results	<ol style="list-style-type: none"> 1. Maritime & Inland Waterways market and user technology understood and fully analysed and user needs updated and analysed 2. Penetration of Galileo and EGNOS in Maritime & Inland Waterways receiver models²⁵ 3. Support to Maritime & Inland Waterways companies commercialising Galileo products 4. Galileo tested in shipborne receivers 5. Galileo timing requirements for R-MODE System established and strategy defined for the inclusion of OS-NMA in fishing vessels receivers and VDES within IALA 6. Coordination established with EMSA, EFCA and FRONTEX for maritime surveillance (collaborative and non-collaborative vessels) in relation to illegal activities (e.g. illegal fishing) and Search and Rescue 7. EGNOS and Galileo user satisfaction survey completed 8. Synergies identified between the use of Galileo services and Copernicus services for Maritime & Inland Waterways activities (e.g. sea and river water level and early

²⁵ Analysis based on internal GSA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

<p>flood and tsunamis detection), Coastal and Marine Exploitation and Preservation, Oil and Gas activities, Maritime Surveillance and Search and Rescue</p> <p>9. Preliminary roadmap designed for the adoption of Copernicus data for Maritime & Inland Waterways, contributing to the priority ecosystem "Mobility-Transport-Automotive".</p>			
Status	This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo and EGNOS receivers in overall number of shipborne models	34 (Galileo) 90 (EGNOS)	40 (Galileo) 90 (EGNOS)	Technology monitoring process; yearly review
3. a) Number of companies commercialising Galileo products	30	50	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Number of shipborne receiver manufacturers engaged in Galileo testing	2	2	Regular monitoring; quarterly review
5. Validation with IALA Members	2	2	Bi-annual review
6. Validation with EMSA, EFCA and Frontex	1	1	Yearly
7. Positive annual EGNOS and Galileo User Satisfaction survey outcome	1	1	Annual report on survey; quarterly review
8. Validation with stakeholders	N/A	10%	Yearly
9. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			

1. Maritime & Inland Waterways section of the market report published in 2021/2023 and technology report published in 2022 and Report on Maritime & Inland Waterways user needs and requirements published in 2022
2. Report on Galileo and EGNOS penetration in maritime receivers
3. Industry database for Maritime & Inland Waterways
4. Agreement with ship-borne receiver manufacturers interested in testing campaign
5. Draft IALA Guidelines on Timing and R-Mode and Guidelines on Cybersecurity and VDES
6. Report on Activities
7. Results of User Satisfaction surveys
8. Report on Synergies
9. Preliminary adoption roadmap of Copernicus use in Maritime & Inland Waterways, contributing to the priority ecosystem "Mobility-Transport-Automotive".

Annual Objective 4	Increase adoption in Rail by building on user needs and providing feedback for service improvements		
Implemented by	EU space programme components market development in rail (WBS 5.02.06 and 5.03.06)		
Expected Results	<ol style="list-style-type: none"> 1. Rail market and application potential understood and fully analysed and Consolidation of user requirements for safety relevant applications and analysis of their impact on EGNSS services 2. Penetration of Galileo and EGNOS in rail receiver models²⁶ 3. Cooperation and coordination with rail stakeholders and associations 4. EUSPA roadmap for rail signalling implemented and updated 5. EGNSS-based signalling solution on low density lines demonstrated 6. EGNOS and Galileo user satisfaction survey completed 7. Preliminary roadmap designed for the adoption of Copernicus data for rail, contributing to the priority ecosystem "Mobility-Transport-Automotive". 		
Status	This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, economical KPI's and CBA results by main stakeholders, users etc	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of vehicles equipped with EGNSS enabled receivers	15	25	Technology monitoring process; yearly review
3. a) Number of companies commercialising Galileo products	22	30	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS	100	100	Regular monitoring; quarterly review

²⁶ Analysis based on internal GSA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

adopters that confirm EGNSS usage)			
4. EGNSS in Rail signalling roadmap objectives achieved	60%	72%	Main stakeholder associations endorse the roadmap; progress towards the objective of EGNSS inclusion into ERTMS
5. Demonstrator / pilot operational low-density railway line with EGNSS-based train positioning system certified	70%	85%	Market and technology process; Agency yearly review
6. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>60% of respondents "very satisfied"	>60% of respondents "very satisfied"	Annual report on survey; quarterly review
7. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Cost/benefit analysis for railway signalling application available, Rail section of the market report published in 2021/2023 and technology report published in 2022 and Report on rail user needs and requirements updated			
2. Report on Galileo penetration in rail receivers			
3. EGNSS based train positioning system architecture and documentation available			
4. Industry database for Rail			
5. EGNSS in rail signalling roadmap partially implemented and certification plan available			
6. Results of User Satisfaction surveys			
7. Preliminary adoption roadmap of Copernicus use in rail contributing to the priority ecosystem "Mobility-Transport-Automotive".			

Annual Objective 5	Increase adoption in Agriculture & Forestry applications by building on user needs and providing feedback for improvement to services
Implemented by	EU Space Components market development in Agriculture & Forestry (WBS 5.02.01, 5.03.01)
Expected Results	<ol style="list-style-type: none"> 1. Agriculture & Forestry applications market and user technology understood and fully analysed and user needs updated and analysed 2. Penetration of Galileo and EGNOS in receiver models for Agriculture & Forestry 27 3. Support to Agriculture & Forestry companies commercialising Galileo products 4. Support EGNSS adoption through dedicated awards for innovative integration of EGNSS in high-precision segment 5. Support for implementation of Galileo differentiators with focus on High Accuracy Service 6. EGNOS and Galileo user satisfaction survey completed

²⁷ Analysis based on internal GSA Technology Monitoring Process and the GNSS Users Technology Report and related assumptions included in Annex 5.

7. Preliminary roadmap designed for the adoption of Copernicus data in Agriculture & Forestry, contributing to the priority ecosystem "Agri-food".			
Status	This objective continues from the previous year.		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo and EGNOS receivers in overall number of models for Agriculture & Forestry	76% (Galileo) 97% (EGNOS)	70% (Galileo) 97% (EGNOS)	Technology monitoring process; yearly review
3. a) Number of companies commercialising Galileo products	91	150	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Award of dedicated prizes for innovative integration of EGNSS in high precision, agriculture and forestry applications and/or devices	1	1	Report on prize(s) and sector-specific winners made available as per schedule; quarterly review
5. Number of receiver models implementing HAS	0	1	Regular monitoring; quarterly review
6. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>60% of respondents "very satisfied"	>60% of respondents "very satisfied"	Annual report on survey; quarterly review
7. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Agriculture & Forestry section of the market report published in 2021/2023 and technology report published in 2022 and Report on user needs and requirements published in 2018 and 2020			
2. Report on Galileo penetration in Agriculture & Forestry receivers			
3. Industry database for Agriculture & Forestry			
4. Report describing the metrics and statistics of participant success after award			
5. Report on Galileo penetration in Agriculture & Forestry receivers, with focus on High Accuracy Service			
6. Results of User Satisfaction surveys			
7. Preliminary adoption roadmap of Copernicus use in Agriculture & Forestry, contributing to the priority ecosystem "Agri-food".			

Annual Objective	Increase adoption in Urban Development and Cultural Heritage applications by building on user needs and providing feedback for improvement to services
6	
Implemented by	EU Space Components market development in Urban Development and Cultural Heritage applications (WBS 5.02.03, 5.03.03)

Expected Results	<ol style="list-style-type: none"> 1. Urban Development and Cultural Heritage applications market and user technology understood and fully analysed and applications user needs updated and analysed 2. Penetration of Galileo and EGNOS in receiver models for Urban Development and Cultural Heritage 3. Support to Urban Development and Cultural Heritage companies commercialising Galileo products 4. Support EU Space Programmes adoption through dedicated awards for innovative integration of EGNSS and Copernicus in Urban Development and Cultural Heritage 5. Accelerate upgrade to Galileo in private and public reference networks 6. Support for implementation of Galileo differentiators with focus on High Accuracy Service (HAS) 7. EGNOS and Galileo user satisfaction survey completed 8. Preliminary roadmap designed for the adoption of Copernicus data in Urban Development and Cultural Heritage, contributing to the priority ecosystem "Construction". 		
	Status This objective continues from the previous year.		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo and EGNOS receivers in overall number of models for Urban Development and Cultural Heritage	80% (Galileo) 98% (EGNOS)	82% (Galileo) 98% (EGNOS)	Technology monitoring process; yearly review
3. a) Number of companies commercialising Galileo products	96	155	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Award of dedicated prizes for innovative integration of EGNSS in high precision Urban Development and Cultural Heritage	1	1	Report on prize(s) and sector-specific winners made available as per schedule; yearly review
5. Number of RTK/PPP network providers confirming upgrade to Galileo	47	52	Regular monitoring; quarterly review
6. Number of receiver models implementing HAS	0	3	Regular monitoring; quarterly review

7. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>80% of respondents "very satisfied"	>80% of respondents "very satisfied"	Annual report on survey; quarterly review
8. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Urban Development and Cultural Heritage section of the market report published in 2021/2023 and technology report published in 2022 and Report on user needs and requirements updated 2. Report on Galileo penetration in Urban Development and Cultural Heritage receivers 3. Industry database for Urban Development and Cultural Heritage 4. Report describing the impact success of the award 5. Report on Galileo implementation in the reference networks 6. Report on Galileo penetration in Urban Development and Cultural Heritage receivers, with focus on High Accuracy Service (HAS) 7. Results of User Satisfaction surveys 8. Preliminary adoption roadmap of Copernicus use in for Urban Development and Cultural Heritage, contributing to the priority ecosystem "Construction".			

Annual Objective 7	Increase adoption in Consumer Solutions, Health and Tourism applications by building on user needs and providing feedback for service improvements		
Implemented by	EU space programme components market development Consumer Solutions, Health and Tourism (WBS 5.02.07 and 5.03.07)		
Expected Results	1. Consumer Solutions, Health and Tourism market and user technology understood and fully analysed and user needs updated and analysed 2. Penetration of Galileo in smartphones increased ²⁸ 3. Support to Consumer Solutions, Health and Tourism companies commercialising Galileo products 4. Development of innovative mobile applications leveraging EU space programme components 5. EGNOS and Galileo user satisfaction survey completed 6. Preliminary roadmap designed for the adoption of Copernicus data in Consumer Solutions, Health and Tourism, contributing to the priority ecosystem "Digital".		
Status	This objective continues from the previous year.		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo penetration in smartphones shipments in Europe	72%	75%	Technology monitoring process; yearly review

²⁸ Analysis based on internal EUSPA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

3. a) Number of companies commercialising Galileo products	141	170	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Positive annual EGNOS and Galileo User Satisfaction survey outcome	>70% of respondents "very satisfied"	>70% of respondents "very satisfied"	Annual report on survey; quarterly review
5. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; yearly review
Outputs relating to the multi-annual work programme objectives:			
1. Consumer Solutions, Health and Tourism section of the market report published in 2021/2023 and technology report published in 2022 and Report on user needs and requirements updated 2. Report on Galileo penetration in Consumer Solutions, Health and Tourism receivers 3. Industry database for Consumer Solutions, Health and Tourism derived from UseGalileo 4. News items published on EUSPA website summarising hackathon/competition results 5. Results of User Satisfaction surveys 6. Preliminary adoption roadmap of Copernicus use in Consumer Solutions, Health and Tourism, contributing to the priority ecosystem "Digital".			

Annual Objective	Increase adoption in Insurance and Finance, Infrastructures, Energy and Raw Materials segments by building on user needs and providing feedback for service improvements		
8	EU space programme components market development in Insurance and Finance, Infrastructures, Energy and Raw Materials (WBS 5.02.08 and 5.03.08)		
Implemented by	1. Insurance and Finance, Infrastructures, Energy and Raw Materials market and user technology understood and fully analysed and user needs updated and analysed 2. Penetration of Galileo in Insurance and Finance, Infrastructures, Energy and Raw Materials receiver models ²⁹ 3. Support to Critical Infrastructures companies commercialising Galileo products 4. Support Commission in regulatory actions or technical studies for adopting Galileo in Insurance and Finance, Infrastructures, Energy and Raw Materials 5. Galileo based multi-frequency receiver close to commercialisation 6. Provision Plan of emerging Timing & Synchronisation (T&S) application offerings (i.e. time integrity, trusted time distribution and remote audit, etc.) defined 7. Galileo user satisfaction survey completed 8. Preliminary roadmap designed for the adoption of Copernicus data for Insurance and Finance, Infrastructures, Energy and Raw Materials, contributing to the priority ecosystem "Energy Intensive Industries".		
Expected Results			
Status	This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification

²⁹ Analysis based on internal EUSPA Technology Monitoring Process and the GNSS Users Technology Report issue 2 and related assumptions included in Annex 5.

1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. % of Galileo and EGNOS receivers in overall number of Critical Infrastructures models	58% (Galileo) 34% (EGNOS)	55% (Galileo) 40% (EGNOS)	Technology monitoring process; yearly review
3. a) Number of CI companies supporting Galileo products	36	55	Use Galileo listed products; yearly review
b) Adopters' retention Index (i.e. % of EGNSS adopters that confirm EGNSS usage)	100%	100%	Regular monitoring; quarterly review
4. Specific support to EC on Critical Infrastructures related activities and studies	100%	100%	Regular monitoring; quarterly review
5. Definition of plans for the launch of new emerging CI Timing functions	0	1	Annual report; quarterly review
6. Positive annual Galileo User Satisfaction survey outcome	>70% of respondents "very satisfied"	>70% of respondents "very satisfied"	Annual report on survey; quarterly review
7. % design of the roadmap for Copernicus data adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1.	Insurance and Finance, Infrastructures, Energy and Raw Materials sections of the market report published in 2021/2023 and technology report published in 2022 and Report on user needs updated		
2.	Report on Galileo penetration in CI receivers		
3.	Industry database for Critical Infrastructures		
4.	Deliver supporting materials or review of documents on EGNSS in CI to Commission (on request)		
5.	Galileo based multi-frequency receiver commercialisation plan report		
6.	T&S Application Offering provision implementation Plan Report		
7.	Results of User Satisfaction surveys		
8.	Preliminary adoption roadmap of Copernicus use in Insurance and Finance, Infrastructures, Energy and Raw Materials, contributing to the priority ecosystem "Energy Intensive Industries".		

Annual Objective	Contribution to the adoption roadmap for Governmental and Security applications by building on user needs and providing feedback for improvement to services
Implemented by	EU space programme components market development in governmental use (WBS 5.02.14 and 5.03.14)
Expected Results	1. Market and user technology understood and analysed

Status	2. In close cooperation with EC to promote Governmental Services within Member States user communities 3. Preliminary roadmap for integrated governmental services adoption including EGNSS, Copernicus and GOVSATCOM		
	This objective continues from the previous year		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Report on potential market size of EU Space programme components in governmental applications (Gov Market Report)	N/A	1	Regular monitoring; quarterly review
2. % design of the roadmap for integrated governmental services adoption	N/A	50%	Annual report; quarterly review
3. Specific support on PRS user related activities.	N/A	100%	Regular monitoring; quarterly review
4. Consolidation of the GOVSATCOM User Requirements and Use Cases	N/A	1	Report; quarterly review
5. Preliminary gap analysis and roadmap for downstream technology R&I in secure SatCom	N/A	1	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Preliminary report on potential penetration of EU Space programme components in governmental and security applications and user technology 2. Material about governmental services provided by EU Space programme components, including status synergies and supportive actions 3. Report on "Preliminary roadmap of an integrated governmental services adoption including EGNSS, Copernicus and GOVSATCOM"			

Annual Objective 10	Increase adoption in Emergency Management and Humanitarian Aid segment by building on user needs and providing feedback for service improvements		
Implemented by	EU space programme components market development in Emergency Management and Humanitarian Aid (WBS 5.02.11 and 5.03.11)		
Expected Results	1. Main beacon manufacturers implementing SAR return link for maritime applications 2. Concept of Operation defined for the remote activation of EPIRBs in maritime 3. Galileo differentiators "SAR Return Link" implemented in the beacons for aviation applications 4. Concept of Operation defined and demonstrated for the remote activation of ELT-DTs in aviation 5. Emergency Management and Humanitarian Aid market and user technology understood and fully analysed and user needs analysed 6. Preliminary roadmap designed for the adoption of EU Space Programme components for Emergency Management and Humanitarian Aid contributing to all priority ecosystems.		
Status	This is a new objective of the Agency		
Indicators	Result 2020	Target 2022	Means & frequency of verification

1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review
2. Roadmap for EU Space Programme components adoption	N/A	1	Annual report; quarterly review
1. Number of maritime SAR beacons including Galileo RLS ready for type approval	3	6	Regular monitoring; quarterly review
2. RBA concept discussed with maritime stakeholders	50%	100%	Regular monitoring; yearly review
3. Development of the first aviation SAR beacon including Galileo RLS complete	90%	100%	Regular monitoring; quarterly review
4. Concept of aviation operations defined for the remote activation of ELT-DTs	90%	100%	Regular monitoring; yearly review
Outputs relating to the multi-annual work programme objectives:			
<ol style="list-style-type: none"> Maritime SAR beacons that includes Galileo RLS developed and published on usegalileo.eu Report on concept of maritime operation Aviation SAR beacon that includes Galileo Return Link Service (RLS) ready for type approval and installation certification. Concept of aviation operations for remote beacon activation using GAL RLS for ELT-DT demonstrated and acknowledged by end users. Emergency Management and Humanitarian Aid section of the market report published in 2021/2023 and technology report published in 2022 and Report on user needs and requirements updated Preliminary adoption roadmap of EU Space Programme components in Emergency Management and Humanitarian Aid contributing to all priority ecosystems. 			

Annual Objective 11	Increase adoption Space segment by building on user needs and providing feedback for service improvements		
Implemented by	EGNSS market development in Space Users (WBS 5.02.13 and 5.03.13)		
Expected Results	<ol style="list-style-type: none"> Space Users market and user technology understood and fully analysed and Space user needs analysed Support to Space Users stakeholder companies commercialising Galileo products or Copernicus data Preliminary roadmap designed for the adoption of EGNSS in space borne applications Preliminary roadmap for the implementation of entrusted tasks for Space Situational Awareness (SSA) 		
Status	This is a new objective of the Agency		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses,	1	1	Market and technology monitoring process; yearly

including UCP outcomes, by main stakeholders			review; UCP Minute of Meetings agreed; bi-annual review
2. Number of companies commercialising Galileo products	1	3	Use Galileo listed products; yearly review
3. % design of the roadmap for EGNSS adoption analysed and prioritised	N/A	10%	Annual report; quarterly review
4. % design of the roadmap for SSA Programme adoption analysed and prioritised	N/A	50%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Space section of the market report published in 2021/2023 and technology report published in 2022 and Report on Space user needs and requirements published			
2. Industry database for Space			
3. Preliminary adoption roadmap for EGNSS use in space applications			
4. Preliminary adoption roadmap for SSA Programme use			

Annual Objective 12	Increase adoption in Fisheries and Aquaculture segment by building on user needs and providing feedback for service improvements		
Implemented by	EU space programme components market development in Fisheries and Aquaculture (WBS 5.02.09 and 5.03.09)		
Expected Results	<ol style="list-style-type: none"> 1. Fisheries and Aquaculture market and user technology understood and fully analysed and Energy user needs updated and analysed 2. Preliminary roadmap designed for the adoption of EU Space Programme components for Fisheries and Aquaculture, contributing to the priority ecosystem "Agri-food". 		
Status	This is a new objective of the Agency		
Indicators	Result 2020	Target 2022	Means & frequency of verification
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	1	1	Market and technology monitoring process; yearly review; Analysis of UCP outcomes; bi-annual review
2. % design of the roadmap for EU Space Programme components adoption	N/A	10%	Annual report; quarterly review
Outputs relating to the multi-annual work programme objectives:			
1. Fisheries and Aquaculture section of the market report published in 2021/2023 and technology report published in 2022 and Report on Energy user needs and requirements published			
2. Preliminary adoption roadmap of EU Space Programme components used in Fisheries and Aquaculture applications			

Annual Objective 13	Increase adoption in Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital segments by building on user needs and providing feedback for service improvements
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Implemented by	EU space programme components market development in Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital (WBS 5.02.10 and 5.03.10)			
Expected Results	<div>1. Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital market and user technology understood and fully analysed and Environment & Air Quality user needs updated and analysed</div> <div>2. Preliminary roadmap designed for the adoption of EU Space Programme components in Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital, contributing to all priority ecosystems.</div>			
Status	This is a new objective of the Agency			
Indicators	Result 2020	Target 2022	Means & frequency of verification	
1. Validation of market and technology analyses, including UCP outcomes, by main stakeholders	N/A	1	Market and technology monitoring process; yearly review; UCP Minute of Meetings agreed; bi-annual review	
2. % design of the roadmap for EU Space Programme components adoption	N/A	10%	Annual report; quarterly review	
Outputs relating to the multi-annual work programme objectives:				
<div>5. Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital sections of the market report published in 2021/2023 and technology report published in 2022 and Report on Environment & Air Quality user needs and requirements published</div> <div>6. Preliminary adoption roadmap of EU Space Programme components in Environmental Compliance-Climate and Weather Services-Biodiversity, Ecosystems and Natural Capital, contributing to all priority ecosystems.</div>				

Annual Objective 14	Develop services, applications and R&D communications on Galileo and EGNOS			
Implemented by	Services, applications and R&D communications (WBS 1.03.01)			
Expected Results	<p>Communication activities relating to EGNOS and Galileo services, and GOVSATCOM, and applications for research and development comprise of the following items:</p> <ol style="list-style-type: none"> 1. Increased awareness of EGNOS and Galileo, their high performance and many benefits, including synergies with Copernicus, 2. Increased awareness and understanding of EGNOS and Galileo as a useful feature and enabling technology for application developers, in particular those requiring more precise and reliable Positioning, Navigation and Timing (PNT) information, 3. Strengthened communication with user networks and communities for EGNOS and Galileo services, 4. Increased awareness amongst innovative enterprises, with a focus on SMEs, who can benefit from leveraging EGNOS and Galileo in their applications, products or services or who can increase the functionality within existing applications by enabling it with EGNSS functionality, 5. Increased awareness of the Galileo programme, its role within the global multi-constellation satellite navigation system, and the benefits of its services, including in combination with other EU space programmes. 			
Status	This objective continues from the previous year			

Indicators	Result 2020	Target 2022	Means & frequency of verification
YoY (Year on Year) increase of traffic to key events/ media/ social media/ and websites	N/A	10%	Means: aggregated traffic volume and statistics Frequency: quarterly
Production and distribution of news and social media content related to services, applications and R&D communications on Galileo and EGNOS	N/A	10 news 5 ad hoc SM campaigns	Means: aggregated traffic volume and statistics Frequency: yearly
Joint Communication plan gathering EGNSS activities including common activities with Entrusted entities of Copernicus and the MS	N/A	1	Means: aggregated measures of number of contacts/SMEs associated with key target audience members of each segment Frequency: yearly
Outputs relating to the multi-annual work programme objectives:			
<ul style="list-style-type: none"> • Annual communications plan • Website creation, maintenance and management • Social media campaigns; publications • Video and multi-media production and distribution • Event creation, participation and management • Media, public relations and stakeholder initiatives • Newsletter production and distribution • Feedback surveys and studies 			

III.02.06 AGENCY MANAGEMENT

As the Agency finances support services out of Title 1 or Title 2 of the Agency's budget, they do not need a separate financing decision as they are covered by administrative autonomy. This part of Section III is not part of the Agency's financing decision.

III.02.06.01 Overview of the Activity

This horizontal activity supports the Agency's core and delegated activities by providing state-of-the-art services to all operations in the areas of legal, procurement, grants, contracts, finance and budget, human resources management, ICT and facility management, control, and internal audit. This enables the Agency to achieve a higher level of strategic and multiannual objectives.

All objectives listed below are recurring and continue from year-to-year. There are no outputs related to any multi-annual objectives as this section refers only to transversal support.

III.02.06.02 Objectives, Indicators, Expected Outcomes and Outputs

Annual Objective 1	Implement efficient management of all legal arrangements for the Agency, in-line with the service delivery needs		
Implemented by	Legal, procurement, grants and contract management (WBS 1.01.02)		
Expected Results	<ol style="list-style-type: none"> 1. Procurement management: planning, preparing and executing procurement file up to signature of legal commitment 2. Grant management: planning, preparing and executing grant file up to signature of legal commitment 3. Legal commitments management: drafting, negotiating, signing, amending, assigning and other support throughout the lifetime of a legal commitment 4. Legal advisory services: identification, verification, assessment and provision of legal opinions 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Procurement and contract award: % of contracts in place and on time	100%	90%	Agency quarterly review
Outputs:			
<ul style="list-style-type: none"> • Executive Director documentation (decisions, letters, guidelines) • Policies • Documents relating to court decisions • Institutional agreements (delegation agreements, working arrangements, regulatory documents) • Acquisition documentation (tenders, calls for proposal) • Legal commitments (contracts, grant agreements, non-disclosure agreements, licenses, etc.) • Reporting (on procurement, grants, contracts on core and delegated tasks) 			

Annual Objective 2	Identifying, developing and implementing activities leading to a workforce capable of delivering the Agency's business needs		
Implemented by	People and talent management (WBS 1.01.03)		
Expected Results	<ol style="list-style-type: none"> 1. Core operational services - delivering core processes such as selection & recruitment, onboarding of new hires, facilitating medical services, contract management, salaries processing - remuneration, organisation of trainings, individual rights entitlements, benefits management etc. ensuring legal compliance and effectiveness and efficiency. 2. Managing talent – get the most suitable people into critical roles by leading performance management exercises, i.e. annual objective setting linked to Agency high level objectives, their regular assessment providing targeted feedback to staff. Find, develop, keep, motivate and help them to perform by implementing best practices in the selection procedures, i.e. behavioural interviewing techniques, assessment centres for management roles, promoting internal mobility etc. 3. Supporting a high-performance organisation – by enabling and promoting the right culture, supporting individual, team and organisational performance through optimisation of available and future resources, analysis and identification of future workforce needs, comprehensive corporate L&D activities, including induction training 		

process, fostering dialogue with staff and their representatives by using various channels and tools

4. Other management responsibilities:

- a. Support to Corporate Risk Management implementing and enforcing the application of the Risk Management process
- b. Development and tracking of Performance Indicators
- c. Support to QM/ IMS and audit programmes (IAS, IAC, Internal)
- d. Support to Continual Improvement and Lessons Learned
- e. Ensure the compliance to data protection internal policies and applicable public regulations

5. Attendance/ Support to various Working Groups and Boards:

- a. Inter-Agency meetings
- b. Complaints Committee
- c. Disciplinary Board
- d. Agency Reviews
- e. Biweekly Administration meetings
- f. ICM and ExCOM

Indicators	Result 2020	Target 2022	Means & frequency of verification
% execution of the Establishment Plan	100%	95%	Regular recording and monitoring; Agency quarterly review
Turnover rate	4,65%	≤ 10%	Regular recording and calculation; Agency annual review
Average rating of quality of training	8,34	>6	Regular recording and calculation; Agency quarterly review

Outputs:

- HR policies, procedures, instruction
- AB related documentation (decisions etc.)
- ED related documentation (decisions etc.)
- Legal documents (contracts of employments)
- HR working documents, manuals

Annual Objective 3	Plan, manage and report on the Agency budget and process all financial transactions
Implemented by	Finance and budget management (WBS 1.01.04)
Expected Results	Budgeting and regular financial management:

	<ul style="list-style-type: none"> Budgeting, monitoring and reporting on level of budget execution to all internal and external clients Daily management of Agency financial transactions Provide Commission with report on the financial management of Delegation Agreements (quarterly and annually) and cash management of all Delegation Agreements Cash flow status (twice a year) and cash management of the EU subsidy Management of Value Added Tax (VAT) exemption for all Agency sites General finance and VAT-specific training as they pertain to EU financial procedures Manage paperless tool 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Commitment rate and rate of payment within prescribed time limits	100% commitment rate, 98,7% payments within time limits	95%	End of year financial results; Agency quarterly review
Outputs:			
<ul style="list-style-type: none"> Monthly financial reporting Draft budget document Official budget documents and amendments for publication in the Official Journal Annual Budget Implementation Report VAT exemption certificates and reimbursement claims Quarterly and annual financial reports for delegated budget 			

Annual Objective 4	Provide a secure and digital working environment on enterprise level for Agency departments within defined scope.		
Implemented by	Information and Communication Technology (WBS 1.01.05)		
Expected Results	<p>The Agency's ICT activities are split along four fundamental lines:</p> <ol style="list-style-type: none"> 1. Systems and infrastructure management: ensure that all systems operate within optimal parameters, are reliable and available to Agency users as required by business 2. User management: ensure the appropriate provision of technical assistance and support 3. Project management of all ICT projects 4. ICT security: ensure the confidentiality integrity and availability of Agency systems 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
L1/L2 support responsiveness	65% in 5 days	95% in 5 days	Agency quarterly review
Core System availability	95%	99%	Agency quarterly review
Detection of attempts to compromise core systems	100%	100%	Agency quarterly review
Projects/delivery schedule respected	50% in time closure	60% in time closure	Agency annual review
Outputs:			
<ul style="list-style-type: none"> Regular monthly/weekly meetings for ICT teams or all ICT department as a whole 			

- Meeting with ICT stakeholders
- Execution and control of core ICT projects (following PM² project management methodology)
- Quarterly produced ICT SEC reports
- Availability of systems and its services as defined by business
- Annual ICT overview report on the infrastructure, budget and HRs dedicated to ICT domain

Annual Objective 5	Maintain operational capability of Agency premises in Prague to support Agency activities		
Implemented by	Facility management and logistics (WBS 1.01.06)		
Expected Results	<ol style="list-style-type: none"> 1. Timely facility management and logistical support to internal customers 2. Accurate asset and inventory management 3. Timely building management 4. Good cooperation with building owner and its representatives 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Operational capability monitored (i.e. number of days building operational capability was maintained expressed as a percentage of days required)	100%	100%	Hard data from ticketing tool and emails with inferred data made available; Agency quarterly review
Outputs:			
<ul style="list-style-type: none"> • On demand facility services report • Activity report for building maintenance and invoicing support • Bi-weekly activity reporting to the Head of Administration management meeting • Execution report on, for example, cleaning services or building management • Specific feedback to requesting party as part of the escalation procedure for reception services, building management, etc. • Updated records of solutions found, or information provided to internal customers, procurement officers or contract managers (tickets solution) • Monthly report based on ticketing tool outputs upon request • On demand facility management satisfaction survey (or feedback based on day-to-day business) • Updated inventory system based on movement and inventory checks • Inventory committee reports and assets review report based on valid financial regulations 			

Annual Objective 6	Identify and implement activities leading to successful Administrative Board activities		
Implemented by	Administrative Board management (WBS 1.01.07)		
	In-line with the Agency's regulation and the Rules of Procedure for the Administrative Board (Board). During this period, the Agency intends to hold a minimum of two scheduled Board meetings. The Agency will also provide the Board with the necessary secretariat over the course of the year.		
Expected Results	<p>The Agency's strategic planning function is a combination of several activities that are required to support the management team and, indirectly, the Administrative Board. In particular, this function focuses on:</p> <ul style="list-style-type: none"> • Ensuring the development of the programme documents, including the Programming Document and Annual Activity Report 		

Indicators	Result 2020	Target 2022	Means & frequency of verification
Scheduled meetings for year are not altered	Yes	Yes	Minutes of meetings; Agency quarterly review
Timely preparation of programming documents and corresponding reporting	100%	100%	Periodic reporting to Administrative Board; EUSPA quarterly review
Outputs			
<ul style="list-style-type: none"> Agenda and minutes of each meeting Board decisions, including written procedures 			

Annual Objective 7	Achieve Agency-wide process capability for Documents and Records Management		
Implemented by	Documents and Records Management (WBS 1.01.08)		
Expected Results	Create and implement policies, processes and procedures for documents and records management covering the Agency's existing tools to improve the efficiency and comply with relevant legal obligations.		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Policies, processes and procedures to manage the Agency's documents and records	Documents Management (DM): 100% Records Management (RM): 10%	DM: 100% RM: based on development & implementation of a Records Management (RMS)	Periodic reporting to the Document Management Board; Agency's quarterly review
Implementation of the enterprise content management system	Documents Management System (DMS): 100% Records Management System (RMS): 0%	NA	Periodic reporting to the Document Management Board; Agency's quarterly review
All new employees and relevant contractors trained	DMS: 100%	DMS: 100%	Records of on-boarding procedure; Agency's quarterly review
Outputs			
<ul style="list-style-type: none"> Policies, processes and procedures to manage the Agency's documents and records Training and awareness sessions 			

Annual Objective 8	Successful compliance with personal data protection rules applicable to the Agency		
Implemented by	Personal data protection (WBS 1.01.09)		
Expected Results	Full Agency compliance with data protection rules (Regulation (EU) 2018/1725)		
Indicators	Result 2020	Target 2022	Means & frequency of verification

% of compliance with data protection rules	1 data breach	95%	Agency quarterly reviews
Outputs			
At the Agency/departmental level there are no further outputs			

Annual Objective 9	Successfully undertake key planning and risk and opportunities management activities		
Implemented by	Risks & Opportunities Management (WBS 1.02.01)		
Expected Results	<p>Ensuring that the corporate risks and opportunities management process is implemented.</p> <p>Successful communication of risks to Agency stakeholders.</p> <p>Successful implementation of risks mitigation/opportunities exploitation plans.</p>		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Quarterly Corporate Risk and opportunities Boards held	Risk Register and Opportunities maintained and up to date 3 Risk Management Boards held	Keep the Risk and Opportunities Register up to date. 4 Risk Management Boards held	Risk and Opportunities Register updates track; EUSPA quarterly reviews
Outputs			
<ul style="list-style-type: none"> Risk and Opportunities register updates 			

Annual Objective 10	Measure and improve the quality of Agency processes		
Implemented by	Quality and IMS (WBS 1.02.02)		
Expected Results	<p>ISO 9001 required Agency Quality Management activities (annual quality audit planning and management review) and the related ISO 9001 certification of the Agency.</p> <p>Development of an Integrated Management System (IMS) for other standards that the Agency intends to be certified against in the future.</p>		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Concerns with regard to Non-conformances with regards to ISO 9001:2015 requirements raised by ISO external auditors	0	0	Annual external quality audit reports
Progress of implementing quality audits (% of audit reports available)	100%	100%	
Implementation processing of open actions in the continuous improvement database	80%	80%	Weekly Flash Reports, Quarterly review, annual Management Review
Outputs			
<ul style="list-style-type: none"> Continued ISO 9001 Certification Annual Quality Audit Plan and Audit Reports Agency WBS and WPDs describing organisation of Agency tasks Quarterly review of core tasks and performance indicator and procurements tracking 			

- Performance indicator definition (Linked from SPD to work packages and staff annual objectives)
- Implementation of Continual Improvement activities including CIBD management, Lessons Learned, Surveys
- Management Review Board
- IMS document libraries (including policies, processes, procedures and work instructions)
- Staff training on quality, IMS and best practices

Annual Objective 11	Ensure Agency fulfils statutory audit and control obligations		
Implemented by	Control audit management and internal control (WBS 1.04.01 and 1.04.02)		
Expected Results	<p>The Agency's internal control coordination and risk management activities are on-going tasks that help fulfil its statutory obligations. These include:</p> <ol style="list-style-type: none"> 1. Manage interaction with auditors (IAS, IAC, external) following the different steps of their respective audit procedures, manage audit reports, and implementation of recommendations until timely closure of each the audits. 2. Develop EUSPA Internal Control Framework (mirroring EC's), implementing it, managing up-to-date performance, and adequate reporting. 3. Incorporate, in the SPD period, the results of the review³⁰ of the Agency's Anti-Fraud Strategy³¹ and the recent issuance of EUSPA Conflict of Interest Implementing Rules³² aiming at enhancing information and training, deepen and structure preventive Conflict of Interest assessments (experts, staff, procurement related actions, AB members); define cooperation with OLAF³³; enhance access in whistleblowing; and improve reporting on Anti-Fraud topics. 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Timely execution of the corresponding yearly audits	100	100	Reporting to Administrative Board; Agency quarterly review
% of key components of the different elements of the Anti-Fraud Strategy defined and implemented	95	100	Reporting to Administrative Board; Agency quarterly review

³⁰ Implementation GSA Anti-Fraud Strategy GSA-OED-SPR-RPT-A06577.

³¹ GSA Anti-Fraud Strategy and Action Plan, 05 March 2015, GSA AB 41 15 03 05 07 (can be found at: <https://www.euspa.europa.eu/media-library/register-of-documents>)

³² Decision on implementing rules on the prevention and management of conflicts of interests with regard to staff members and external workforce, 28 January 2021, GSA-OED-AB-DEC-A09370, GSA-AB-63-21-01-08.

³³ Decision of the Administrative Board of the EUSPA concerning the terms and conditions for internal investigations in relation to the prevention of fraud, corruption and any illegal activity detrimental to the Union's interests and the accession to the Interinstitutional Agreement of 25 May 1999 concerning internal investigations by the European Anti-fraud Office, forthcoming.

Timely issuance of the Internal Control Standards (or ICF) compliance report	50	100	Reporting to Administrative Board; Agency quarterly review
Timely issuance of the Declarations of Compliance	100	100	Prepared for ED and DG DEFIS
Outputs:			
<ul style="list-style-type: none"> Agency Internal Audit Capability audit reports and annual audit review reports. EC Internal Audit Service audit reports and annual audit review reports. Procurement for external auditors services. And their audit reports for delegated funds. Declaration of Assurance and Management Declarations under Delegation Agreements. Internal Control Framework and its compliance report. Anti-fraud internal regulation, information and daily support. Gifts and conflict of interest registries. Business continuity management framework documentation 			

Annual Objective 12	Develop Corporate Communications for the Agency		
Implemented by	Corporate Communications (WBS 1.03.02)		
Expected Results	<ol style="list-style-type: none"> Rebrand exercise for the new EUSPA, creation of a new corporate identity and communication to old and new stakeholders, user communities and general public Enhanced overall awareness of the new Agency and better understanding of its mission, vision and values Increased awareness of EUSPA's Work Programme and achievements Consolidated and strengthened relationships with existing and new key European players in the space sector, key GNSS user communities, as well as Copernicus, GOVSATCOM and SSA communities. Strategic partnerships built and/or strengthened Increased awareness of and appreciation for the Agency's work by relevant EU stakeholders in the Member States Strengthen and create new partnership and appreciation for the Agency's contribution by Agency facility host countries Established Agency crisis communications procedures 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
YoY increase in traffic to key event/ media/social media/internet touchpoints	N/A	10%	Means: aggregated traffic volume statistics for the key touchpoints Frequency: quarterly
Annual communications Plan	100%	1	Means: aggregated measures of number of contacts/users associated with key target audience members of each segment, activities, actions Frequency: yearly
Outputs			
<ul style="list-style-type: none"> Crisis communications manual Website creation, maintenance and management Social media campaigns 			

- Production and dissemination of publications
- Production and dissemination of videos
- Event creation, participation and management (exhibition creation, advertising, promotion and presentation)
- Media and public relations initiatives
- Newsletter production and distribution
- Feedback surveys and studies

Annual Objective 13	Develop internal communications for the Agency		
Implemented by	Internal Communications (WBS 1.03.03)		
Expected Results	<p>The Agency uses internal communications to empower its staff and create an inclusive learning environment to ensure staff retainment and growth. This objective is meant to:</p> <ol style="list-style-type: none"> 1. Foster a culture of positive team spirit and customer service 2. Promote better staff understanding and awareness of the Agency's mission, team and objectives 3. Enable staff to project a correct and consistent message about the Agency's key objectives to the outside world, allowing them to serve as "communication ambassadors" 4. Improve working environment by increasing communication flow across departments and by enhancing information sharing 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
YoY involvement of staff in Agency internal communication activities	100% (see Communication Tracker)	10% increase	Means: aggregated traffic volume statistics for the key touchpoints Frequency: yearly
Staff improved understanding of the Agency mission, vision, and objectives (through surveys and consultations)	100% (see Communication Tracker)	10% increase	Means: aggregated results of surveys and other feedback mechanisms Frequency: yearly
YoY increase in staff understanding or their role of EUSPA ambassadors	100% (see Communication Tracker)	10% increase	Means: aggregated results of surveys and other feedback mechanisms Frequency: yearly
Outputs	<ul style="list-style-type: none"> • Annual communications plan • Event creation, participation and management • Newsletter production and distribution • Specific Briefing material • Feedback surveys and studies • Learning and development initiatives 		

Annual Objective 14	Develop stakeholder communications for the Agency		
Implemented by	Stakeholder liaison and communications (WBS 1.03.04)		
Expected Results	The Agency maintains and improves stakeholder liaison, and reach out to new stakeholders vis a vis the new EUSPA responsibilities and communications to:		

<ol style="list-style-type: none"> 1. Increase dialogue and strategic partnerships aimed at fulfilling mutually-shared goals 2. Enhance positive and open working relationships, exchange information and facilitate communications and liaison 3. Increase the visibility of and appreciation for the Agency's work and its role within the EGNSS programmes as well as Copernicus and GOVSATCOM 4. Build trust and engage stakeholders as partners who can act as multipliers and further share key information and actively participate in the Agency's work and success 5. Better awareness amongst key stakeholders of the Agency's vision, mission and what it needs to succeed 6. Increase understanding and appreciation for the Agency's work, especially amongst the Commission, related DG colleagues, members of the Administrative Board, Copernicus entrusted entities and other key contacts from the EU Member States and relevant members and committees in the European Parliament 			
Indicators	Result 2020	Target 2022	Means & frequency of verification
YoY increase in joint communication initiatives with stakeholders	100% (see Communication Tracker)	10% increase	Means: aggregated volume of communication, events, and aggregated analytics Frequency: yearly
YoY increase in profile and awareness by the stakeholder base across all target audience entities	100% (see Communication Tracker)	10% increase	Means: aggregated measure of number of ad-hoc and solicited (surveys) positive responses Frequency: quarterly
Outputs <ul style="list-style-type: none"> • Communication plan • Website development and management • Social media campaigns • Production and dissemination of publications • Production and dissemination of videos • Event creation, participation and management (exhibition creation, advertising, promotion and presentation) • Joint communication activities and synergies • Media and public relations initiatives • Newsletter production and distribution • Feedback surveys and studies 			

Annual Objective 15	Ensure full compliance with the applicable ³⁴ Security Rules for the Agency
Implemented by	Agency transversal security (WBS 2.02.01)
Expected Results	<ol style="list-style-type: none"> 1. Management of authorisations to access EU Classified Information (EUCI) 2. Management and maintenance of COMSEC accounts held by the Agency 3. Issuing security incident reports 4. Maintaining records of entries/exits to secured areas

³⁴ Pursuant art.96 of Regulation 2021/696, the Agency shall adopt its own security rules equivalent to those of the Commission. Until then, the Commission security rules are applied pursuant art.110 of the same Regulation.

5. Delivery of EUCI documents			
Indicators	Result 2020	Target 2022	Means & frequency of verification
% of compliance with Commission decisions 2015/444 and 2015/443 (or equivalent decisions adopted in the meantime by the Administrative Board of the Agency)	100 %	100 %	Annual ad-hoc external inspections and audits reports; Agency quarterly review
Outputs			
<ul style="list-style-type: none"> • Authorisations to access EUCI • Security incident reports • Delivery of EUCI documents • COMSEC transfers and transportations 			

Annual Objective 16	Security assurance of internal Agency systems/areas		
Implemented by	Accreditation Panel of internal systems (WBS 2.02.03) and Information Security Steering Board (ISSB)		
Expected Results	<ol style="list-style-type: none"> 1. Organisation of the accreditation review of internal systems/areas of the Agency for the handling of EUCI and report accordingly to the Agency's Security Accreditation Authority 2. Security Accreditation statements for internal systems signed by the Security Accreditation Authority of the Agency 3. Organisation of the reviews of the Information Security Steering Board (ISSB) for the internal systems of the Agency, in compliance with the ICT Security Policy of the Agency 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Number of internal accreditation reviews	6	5	Internal accreditation control list, Agency quarterly review
Number of ISSB reviews	N/A	>2	ISSB quarterly meetings
Outputs			
<ul style="list-style-type: none"> • Security accreditation report • SAA decision/authorisation/approval to operate Agency areas/systems/HW • ISSB recommendations 			

Annual Objective 17	Support the electronic exchange of R-UE/EU-R information.		
Implemented by	Agency Crypto Distribution Authority and TEMPEST Authority (WBS 2.02.02)		
Expected Results	<ol style="list-style-type: none"> 1. Implementation of the Space Programme Infrastructure for Delivery of Encrypted Restricted (SPIDER) service 2. SPIDER Networks operational management 		
Indicators	Result 2020	Target 2022	Means & frequency of verification
Number of keys generated	N/A	TBC	Agency quarterly review
Number of distributions to external CDAs	N/A	TBC	Agency quarterly review
Key copies distributed	N/A	850	Agency quarterly review

Number of community management requests	N/A	1 800	Agency quarterly review
Outputs			
<ul style="list-style-type: none">• Cryptographic material• Distribution notes			

III.03 Delegated Activities (FOR INFORMATION ONLY)

III.03.01 EGNSS EXPLOITATION PROGRAMME MANAGEMENT

III.03.01.01 Overview of the Activity

In 2022, the Agency will ensure the management of the EGNSS Exploitation Programmes as delegated to the Agency through the FFPA. For that, and in addition to the own tasks, the Agency will assign tasks to the European Space Agency and will procure industrial tasks.

The Agency will upgrade the EGNSS services to achieve the targeted service milestones.

With respect to the EGNOS Exploitation Programme, the following key milestones are expected to be achieved in 2022:

- ESR 242B Qualification review
- ESR 243 Critical Design Review (CDR)
- EGNOS V3.1 Critical Design Review (CDR-1)
- Delivery of the first (about 20) EGNOS V3 RIMS sites to industry and start of EGNOS V3 deployment
- EGNOS Maritime Service Readiness
- Service Provision transition to the N-ESP
- Launch of the GEO-4 payload

Furthermore, the following procurement actions are planned to be initiated or completed, pending approval from the AWP 2022 by the European Commission:

- EGNOS V3 (8 sites) and V2/V3 (1 site) sites contracts covering the site preparation (Stage1) as well as the Hosting Services (HS) activities until end-2025 (Stage2 - preliminary hosting services and Stage3 – nominal Hosting Services).
- NESP Framework and first specific contracts: A baseline scenario has been defined in the NESP Tender Specifications taking into account the latest EGNOS V3 development schedule. The NESP being a FWC, a number of SCs were defined, also including options

- allowing to cope with further V2-V3 transition schedule changes. A refined proposal is expected to be delivered by early 2022, and contract award is planned before mid-2022.
- SDAF development: the Service Data Access Facility (SDAF) will i) support the delivery of the EDAS and other EGNOS data dissemination services, ii) secure and control the access of users to EGNOS data through the Internet, iii) ensure smooth transition from EGNOS V2 to V3 for EDAS service provision, iv) comply to the EGNOS applicable security rules and regulations with justifications feeding the overall EGNOS security accreditation process. This sub system is planned to enter into Operation with EGNOS V2 in Q3 2024; the procurement under an innovation partnership procedure has started in 2021 for a contract kicked foreseen in second part of 2022 and a product available in 2024 for deployment and further integration first with EGNOS V2 system.
 - Following the EGNOS V3 development re-baselining, the procurement of an EGNOS V2 LIFEX-1 release is planned to be initiated in 2022, aiming at an entry in service in 2025 to further resolve the NLES G2 obsolescence with NLES G3 deployment extended also for GEO2 and use the removed NLES G2 as spares to maintain GEO1 NLES.
 - EUSPA proposed to develop a pre-operational end-to-end EGNSS service demonstrator ensuring a long-term centralised, flexible, and modular experimentation capability.

With respect to the new EASA regulatory framework for the certification of EGNOS, including the possible Design and Production Organisation (DPO) certification process, it must be noted that EASA Rule Making Task 0161, in which EUSPA acts as an observer, is currently defining the draft implementing rules to replace the interoperability regulation as part of the Single European Sky regulations.

The text of this regulation will be open to review through the EASA Notice of Proposed Amendment (NPA) process, at the time of writing the date of the expected NPA is not known, however it is required in the EASA Basic Regulation that these new implementing rules must be in place by 12 September 2023.

The impact to EGNOS due to these regulatory changes is not known at this stage, the possibilities include:

- No change, if no Design nor Production organisation certification is required for EGNOS, maintaining the current EGNOS Design Safety Case and industrial Declarations as the design guarantees.
- The need to certify a Design and a Production organisation, in which case EUSPA may need/choose to be certified in one or both of these roles.
- The need to modify the certification process for EGNOS in-line with the final role of EASA in terms of the certification responsibilities for the EGNOS equipment.

In the meantime, EUSPA is assessing the potential impacts of these changes into the EGNOS Programme.

For what concerns the Galileo Exploitation Programme, year-2022 will be a key year for the Galileo Programme and the Agency, as some important preparation activities will be well under way to ensure the Agency readiness to take over new task as defined in the FFPA

Indeed, in accordance with Article 49.4 of the FFPA, the Commission may assign the **Contracting Authority for the contract implementation phase** to EUSPA not earlier than 1 January 2023 and no later than 30 June 2023.

In addition, in accordance with Article 49.7 of the FFPA, as of the earlier of the hand-over of the development step associated to PRS FOC or 30 June 2023, EUSPA will become the **System Prime for Galileo System in Operation**. This encompasses two new streams of responsibilities:

- Responsible for changes to the system in operation for the purpose of (maintenance and) short to mid-term improvements
- Responsible for changes to the system in operation for the deployment of ground in operational infrastructure

EUSPA role and responsibility as System Prime of the System in operations is already becoming today a reality. In fact, a substantial amount of activities in relation to the deployment of the new operational chain have been agreed with other programme partners (EC and ESA) to be shaped as

an “exploitation data-package”, which will be re-assigned to EUSPA. On top of these exploitation data-package, EUSPA is also taking the lead towards:

- the definition and execution of independent “stress tests” (contingency scenarios) to assess and characterize the system robustness from a service perspective
- Oversight of the deployment activities and security governance related to the pre-operational chain by implementation of integrated teams with specific mandate

Moreover, EUSPA is endeavouring to become responsible for changes to the system in operation for space assets in operational infrastructure (for Galileo starting with Launch 15). Iterations are ongoing with the launch service provider to set up the necessary arrangement.

In terms of specific activities, the following key milestones are expected to be achieved in 2022:

- **Services:**
 - The 1st technical update of the OS FOC based on System build 1.7 and GSC v1.2 with launch 11, 12 and 13 and the navigation extended mode, is planned to be declared by end 2022, leading to the publication of the OS Full Operational Capability Service Definition Document (SDD) issue 2.0.
 - High Accuracy Service declaration for Phase 1 (“Initial Service Provision”). This service will enable High accuracy data and providing better ranging accuracy, enabling sub-meter level positioning accuracy. The Galileo/Search and Rescue Full Operational Capability is expected to be declared by early 2023 with an update of the SAR Service Definition Document (SDD) to version 3.0. This includes an extension of the coverage area to the Indian Ocean through the entry into operations of the 4th MEOLUT and the provision of SAR NAGUs.
- **Ground Infrastructure:**
 - Completion of FOC2 site permanent extension at GCC-D for System Build 2.0 deployment;
 - New elements to be connected to the operational chain at the GSC;

- Entry into operations of the 7th Galileo Telemetry, Tracking and Commanding (TTC) Station in Kourou;
 - Entry into service of a new Galileo GSS.
- **Space Infrastructure:**
 - Launch of second Batch 3 satellites;
 - Launch of third Batch 3 satellites;
 - Preparation of first launch under EUSPA in 2024.
- **Major Procurement activities:**
 - Signature of the next framework contracts for SAR/Galileo service provision;
 - Signature of the next framework contracts for GSC infrastructure;
 - Signature of the next framework contracts for GRC infrastructure and hosting services.
- **Responsibility/perimeter:**
 - Preparation activities for transition arrangement for EUSPA to become the System Prime for the System in Operations (see above text).

During the exploitation phase of each programme, compliance with the Quality Framework will be assessed through audits conducted by an independent Oversight Function. The schedule for such audits will be agreed on an annual basis and will consist of a sequence of audits targeted at the implementation of specific processes, with the goal that all processes considered critical for service provision are audited at least every 2 years. Based on reports from these audits, and after consultation with the relevant entity responsible for exploitation, the Oversight Function will issue recommendations, as appropriate, to the Executive Director and/or the Commission as appropriate.

III.03.02 GOVSATCOM

III.03.02.01 Overview of the Activity

The Agency shall finalise the preparatory action activities entrusted by the Commission under the GOVSATCOM Preparatory Action contribution agreement and will implement the activities entrusted by the Commission under the Space programme contribution agreement for what concerns the GOVSATCOM component.

In particular, the coordination of the network of governmental satellite communication users shall lead to the consolidation of the needs and requirements for secure SatCom and to the definition of the respective Use Cases that will drive the conceptual definition of the secure satellite communication services to be enabled by the future EU GOVSATCOM programme.

EUSPA will support the creation of the needed policy instruments by the European Commission. In particular, EUSPA will provide technical inputs for the drafting of the Implementing Acts related to the GOVSATCOM component of the Space Programme (i.e. service portfolio and sharing and prioritisation), taking into account inputs from the ENTRUSTED project, if available.

Leveraging the extensive experience in the management of secure and governmentally secure systems, the Agency shall support the Commission in defining the Security Requirements Implementing Act, contributing to the assessment and definition of security aspects such as risk and threat analyses, Programme Security Instructions and Classification Guides. In that respect a security requirements document for the EU GOVSATCOM shall be defined.

Furthermore, the consolidation of the user and the security requirements for the future EU GOVSATCOM, shall allow to explore alternative preliminary design options for the GOVSATCOM ground infrastructure (Hubs) through specific procurement, which will pave the way for the next Hubs development.

Along with the coordination of user-related aspects, EUSPA is entrusted with the procurement and the operation of the GOVSATCOM ground infrastructure (GOVSATCOM Hubs), with the support of the Commission in the definition of Implementing Acts and security aspects of the component.

III.03.03 SPACE SITUATIONAL AWARENESS ACTIVITIES

III.03.03.01 Overview of the Activity

With respect to Space Situational Awareness the Agency shall implement preparatory activities in relation to User uptake, information and services and other connected activities, and ensure the transfer of the front desk from SATCEN to EUSPA if so decided by the European Commission.

The Space Situational Awareness activities entrusted to EUSPA are summarised in Section II.02.02.03.

III.03.04 RESEARCH & DEVELOPMENT ACTIVITIES

III.03.04.01 Overview of the Activity

The Horizon 2020 EU Framework programme for research and innovation provides opportunities for the development of new applications (apps) for use with EGNOS and Galileo in different market segments. The Commission entrusts the Agency with the implementation of H2020 activities, as defined in the Delegation Agreement.

In 2022-2024 some of the H2020 projects will still be running, the Agency shall be responsible for monitoring the projects, making the necessary checks and recovery procedures, and for performing budget implementation tasks covering revenue and expenditure within the meaning of the Financial Regulations. The Agency shall also conclude public procurement procedures and manage the ensuing contracts - including the operations required to launch public procurement procedures. It shall also provide support to the Commission in implementing the Galileo-related activities.

In 2022, the Agency will manage running projects from 4th and 5th Horizon 2020 calls. No additional calls for proposals are expected after 2020. As part of the H2020 Delegation, the Agency will organise events and other opportunities to promote participation in and the results of the programme.

In addition to the abovementioned tasks, the Agency has also endorsed the launch and management of PRS user segment related procurements organised into two items, PRISMA and DISPATCH. By 2020, these activities will be complete, and the Agency envisages no further PRS activities under this agreement.

Fundamental Elements complements the EU's Horizon 2020 research programme and focuses on supporting the development of innovative chipset and receiver technologies that industry would not yet invest in on its own initiative, thus accelerating the integration of Galileo and EGNOS into market-ready devices.

As per H2020 also for FE many projects related to the programme 2014-2020 will be still running and the Agency shall be responsible for monitoring the projects.

In 2022, the Agency will manage the following running projects:

1. Aviation DFMC SBAS Receiver Prototype
2. Enhanced Receiver for autonomous driving/navigation
3. Enhanced GNSS Receiver/User Terminal
4. Development of an advanced interference detection and robustness capabilities system
5. Development of a drone-borne double frequency Galileo receiver
6. Shipborne double frequency multi-constellation receiver (E1/E5)
7. Receiver for localisation in train signalling
8. Receiver technologies for high-precision in mass-market

No additional calls for proposals or tenders related to the FE programme 2014-2020 are expected after 2020 and the Agency will organise events and other opportunities to promote participation in and the results of the programme.

In line with the current developments, the next FE Work Programme (WP) for the period 2021-2027 will continue to be driven and prioritised by market segments user needs.

A particular focus will be on non-mature market with low EGNSS penetration (e.g. critical infrastructure) or on long lead term market (e.g. Rail).

In addition, the new developments will be oriented to commercial products with a clear-cut from prototype receivers (that were developed in the past to leverage new services).

As in the past the objective was to anticipate the Galileo differentiators, the new FE framework is focused on the operational implementation of current differentiators as OS-NMA (Open Service Navigation Message Authentication), HAS (High Accuracy Service) and triple frequency to ensure the successful development and ramp up of new and enhanced Galileo services introduced by its evolutions. In parallel, the commercial implementation of new differentiators as CAS (Commercial Authentication Service) or ARAIM (Advanced Receiver Autonomous Integrity Monitoring) will be explored.

In 2022, the following new calls will be launched:

1. HAS Rx in Agriculture & Geomatics
2. OSNMA in consumer solutions
3. New remote beacon activation (RBA) for maritime
4. Galileo enabled device for the reception of Emergency Warnings based on Galileo EWS
5. Connectivity (e.g. 5G, SatCom)
6. Artificial Intelligence, Machine Learnings

and the following tender:

7. SBAS Authentication

Concerning the Horizon Europe downstream Space, EUSPA is delegated implementation of the programme and the following priorities related to Space Programme Components will be supported:

- Creation of the synergies between space and key enabling technologies (big data, advanced manufacturing, robotics and artificial intelligence);
 - Foster a thriving, and entrepreneurial and competitive space sector;
- This priority could be supported through a dedicated Space-based entrepreneurship programme that will aim at the promotion, development, incubation and upscaling

(including support to Venture Capital activities) of start-ups across all space application areas.

- Provision of secure non-dependence in accessing and using space in a safe and secure manner.

Broad Lines of activities concerning the downstream Space include:

- European Global Navigation Satellite Systems (Galileo and EGNOS): innovative applications, global uptake including international partners, solutions improving robustness, authentication, integrity of services, development of fundamental elements such as chipsets, receivers and antennas, sustainability of supply chains. Next generation systems development for new challenges such as security or autonomous driving;
- Copernicus: innovative applications, global uptake and international partners. Next generation systems development for new challenges such as climate change, and security;
- Space Situational Awareness: robust EU capacity to monitor and forecast state of the space environment e.g. space weather, space debris and near-Earth objects, and new service concepts, such as space traffic management, applications and services to secure critical infrastructure in space and on Earth;
- Secure Satellite Communications for EU governmental actors: solutions for the widest possible range of governmental users and associated user equipment in architectural, technological and system solutions for space infrastructure, supporting the EU's autonomy.

III.03.05 USER UPTAKE ACTIVITIES

III.03.05.01 Overview of the Activity

In addition to the R&D programs described in the section above, several activities will be performed by EUSPA in the period 2022-2024 under delegation from the European Commission as described in section II.02.02.04 User Uptake Activities.

- Support to the European Commission in the implementation of the Space Strategy for Europe
- Extension of the User Consultation Platform (UCP) to Copernicus and GOVSATCOM users
- Support to the European Commission in the area of International Relations
- Support to the European Commission in space data management
- Capacity building activities

In 2022 in particular the work will focus to consolidate the adoption roadmap of Copernicus and other space programme components.

The description of the detailed tasks under user uptake will be described in the respective space programme Work Plans.

Annexes

Annex I: Resource Allocation Per Activity (2022 – 2024)

Activity	FTE 2022	FTE 2023	FTE 2024
Security accreditation tasks³⁵			
TA	14.2	15.2	15.2
CA, SNE	10.4	10.4	11.4
Total	24.6	25.6	26.6
PRS Core activities			
TA	1.7	2.7	2.7
CA, SNE	0.4	0.4	0.4
Total	2.1	3.1	3.1
GSMC Operations & preparation			
TA	28.8	28.8	28.8
CA, SNE	22.7	22.7	21.7
Total	51.5	51.5	50.5
Communication, promotion and marketing of the services			
TA	19.1	19.1	19.1
CA, SNE	4.8	4.8	2
Total	23.9	23.9	21.1
Agency Management			
TA	38.2	44.2	44.2
CA, SNE	19.1	15.1	14.1
Total	57.3	59.3	58.3
EGNSS Exploitation			
TA	92.4	100	100
CA, SNE	7.5	6.5	5.5
Total	99.9	106.5	105.5
EGNSS core operational security			
TA	14.2	14.8	14.8
CA, SNE	0.5	0.5	0.5
Total	14.7	15.3	15.3
GOVSATCOM			
TA	8.5	10.3	10.3
CA, SNE	1.2	1.2	1
Total	9.7	11.5	11.3
SST front desk			
TA		7	7
CA, SNE		4	4

³⁵ The Agency Staff providing transversal administrative support to the SAB does not have access to SAB activities neither are these Staff accounted for in the Staff under the responsibility of the SAB.

Total		11	11
Research & Development activities			
TA	13.9	15.9	15.9
CA, SNE	3.4	2.4	1.4
Total	17.3	18.3	17.3
Secure Connectivity			
TA		5	8
CA, SNE		5	6
Total		10	14
Total FTE TA	231	263	266
Total FTE CA, SNE	70	73	68
Total FTE	301	336	334

Note: The data displayed are projected allocations at the beginning of the respective calendar year. Numbers for SST Front Desk are subject to decision of the Commission on the transfer of the activity. Numbers for Secure Connectivity are in line with those included in the Commission's proposal of 15 February 2022. It is noted that both sets of numbers are for total Agency resourcing, including transversal functions.

Annex II: Financial Resources 2022 – 2024

All figures in this section are in EUR.

TABLE 1 – EXPENDITURE

	2021		2022	
	Commitment Appropriations	Payment Appropriations	Commitment Appropriations	Payment Appropriations
Title 1	27 989 700,15	27 989 700,15	34 813 851,77	34 813 851,77
Title 2	10 360 515,02	10 360 515,02	14 868 640	14 868 640
Title 3	18 780 000,00	5 794 000,00	20 350 000,00	20 350 000,00
Total	57 130 215,17	44 144 215,17	70 032 491,77	70 032 491,77

Commitment Appropriations

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
Title 1 – Staff Expenditure							
11 - Salaries and Allowances	21 632 036,98	25 172 492,15	31 894 556,77	31 894 556,77	27%	36 859 503	40 296 300
Of which establishment plan posts							
Of which external personnel							

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
12 Expenditure relating to Staff Recruitment	51 714,00	100 000	100 000,00	100 000,00	0%	70 000,00	70 000,00
1210 Medical Expenses	76 024,37	133 681	88 755,00	88 755,00	-34%	125 183	150 500,00
1300 Missions	266 542,52	783 709	1 000 000,00	1 000 000,00	28%	1 000 000,00	1 100 000,00
14 Training	161 904,32	568 000	628 000,00	628 000,00	11%	598 000,00	602 000,00
1500 Social Welfare	340 998,95	454 818	585 540,00	585 540,00	29%	650 000,00	650 000,00
16 External Services	561 960,00	775 000	515 000,00	515 000,00	-34%	350 000,00	350 000,00
17 Receptions and events	98,73	2 000	2 000,00	2 000,00	0%	2 000,00	2 000,00
Title 2 – Infrastructure and operating expenditure							
20 Rental of buildings and associated costs	2 752 954,49	3 154 958,30	3 576 128,00	3 576 128,00	13%	5 528 107	4 956 778,00
21 Information and communication technology	3 032 886,78	4 988 160,00	7 585 604,00	7 585 604,00	52%	6 421 295	7 753 320,00
22 Movable property and associated costs	6 799,98	80 000,00	249 100,00	249 100,00	211%	382 020	57 305,00
23 Current administrative expenditure	1 021 433,09	1 629 896,72	2 817 558,00	2 817 558,00	73%	2 965 514	2 013 946,00
24 Postage / Telecommunications	156 726,64	130 000,00	144 250,00	144 250,00	11%	230 000	185 653,00

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
25 Meeting Expenses	6 908,90	65 000,00	115 000,00	115 000,00	77%	109 242	159 181,00
26 Running costs in connection with operational activities	10 514,84	312 500,00	381 000,00	381 000,00	22%	238 000	475 000,00
27 Information and publishing							
28 Studies							
Title 3 – Operational Expenditure							
Operational Expenditure							
3100 Expenditure on Studies	4 404 163,50	18 000 000,00	19 350 000	19 350 000	8%	20 080 000,00	20 640 100,00
3300 SAB expenditure	965 811,66	780 000,00	1 000 000	1 000 000	28%	1 000 000,00	1 100 000,00
Total Expenditure	35 449 479,85	57 130 215,17	70 032 491,77	70 032 491,77	23%	76 608 864,00	80 562 083,00

Payment Appropriations

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
Title 1 – Staff Expenditure							

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
11 - Salaries and Allowances	21 632 036,98	25 172 492,15	31 894 556,77	31 894 556,77	27%	36 859 503	40 296 300
Of which establishment plan posts							
Of which external personnel							
12 Expenditure relating to Staff Recruitment	51 714,00	100 000,00	100 000	100 000	0%	70 000,00	70 000,00
121 Medical Expenses	76 024,37	133 681,00	88 755,00	88 755,00	-34%	125 183	150 500,00
13 Missions	266 542,52	783 709,00	1 000 000	1 000 000	28%	1 000 000,00	1 100 000,00
14 Training	161 904,32	568 000,00	628 000,00	628 000,00	11%	598 000,00	602 000,00
15 Social Measures	340 998,95	454 818,00	585 540,00	585 540,00	29%	650 000,00	650 000,00
16 External Services	561 960,00	775 000,00	515 000,00	515 000,00	-34%	350 000,00	350 000,00
17 Receptions and events		2 000,00	2 000	2 000	0%	2 000,00	2 000,00
Title 2 – Infrastructure and operating expenditure							
20 Rental of buildings and associated costs	2 752 954,49	3 154 958,30	3 576 128,00	3 576 128,00	13%	5 528 107	4 956 778,00

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
21 Information and communication technology	3 032 886,78	4 988 160,00	7 585 604,00	7 585 604,00	52%	6 421 295	7 753 320,00
22 Movable property and associated costs	6 799,98	80 000,00	249 100,00	249 100,00	211%	382 020	57 305,00
23 Current administrative expenditure	1 021 433,09	1 629 896,72	2 817 558,00	2 817 558,00	73%	2 965 514	2 013 946,00
24 Postage / Telecommunications	156 726,64	130 000,00	144 250,00	144 250,00	11%	230 000	185 653,00
25 Meeting Expenses	6 908,90	65 000,00	115 000,00	115 000,00	77%	109 242	159 181,00
26 Running costs in connection with operational activities	10 514,84	312 500,00	381 000,00	381 000,00	22%	238 000	475 000,00
27 Information and publishing							
28 Studies							
Title 3 – Operational Expenditure							
Operational Expenditure							
3100 Expenditure on studies	4 404 163,50	5 014 000,00	19 350 000	19 350 000	82%	20 080 000,00	20 640 100,00

	Executed Budget 2020	Budget 2021	Draft Budget 2022 (Agency Request)	Draft Budget 2022 (Budget Forecast)	VAR 2022/2021	Envisaged in 2023	Envisaged in 2024
3300 SAB expenditure	965 811,66	780 000,00	1 000 000	1 000 000	28%	1 000 000,00	1 100 000,00
Total Expenditure	35 449 479,85	44 144 215,17	70 032 491,77	70 032 491,77	41%	76 608 864,00	80 562 083,00

TABLE 2 – REVENUE

Revenues	2021 Revenues estimated by the agency	2022 Budget Forecast
EU contribution	56 175 273,17	68 345 459,77
Other revenue	954 942	1 687 032,00
Total revenue	57 130 215,17	70 032 491,77

Revenues	2020 Executed Budget	2021 Revenues estimated by the agency	2022 Budget as requested by the agency	2022 Budget Forecast	VAR 2022 /2021	Envisaged 2023	Envisaged 2024
1 Revenue from Fees and Charges							

2. EU Contribution	34 664 000.40	56 175 273,17	68 345 459,77	68 345 459,77	89%	74 762 237,00	78 620 165,00
Of Which Administrative (Title 1 And Title 2)	29 729 479.45	38 296 365,45	49 682 491,77	49 682 491,77	59%	55 528 864,00	58 751 588,00
Of Which Operational (Title 3)	4 934 520.95	17 671 718,72	18 618 413,23	18 618 413,23	278%	19 233 373,00	19 868 577,00
Of Which Assigned Revenues Deriving from Previous Years' Surpluses	61 381.40	207 189	44 554,77	44 554,77	-78%		
3 Third Countries Contribution (Incl. EFTA and Candidate Countries)	785 479.45	954 942	1 687 032	1 687 032	87%	1 846 627,00	1 941 918,00
Of Which EFTA	785 479.45	954 942	1 687 032	1 687 032	87%	1 846 627,00	1 941 918,00
Of Which Candidate Countries							
4 Other Contributions							
Additional EU funding stemming from Grants (FFR Art.7)							
Additional EU funding stemming from Contribution agreements (FFR Art.7)	753 040 905	1 574 943 399	2 374 283 704	2 374 283 704	51%	1 463 897 772	1 317 036 323
Additional EU funding stemming from Service Level Agreements (FFR Art. 43.2)							
5 Administrative Operations							

6 Revenues from Services Rendered Against Payment							
7 Correction of Budgetary Imbalances							
Total Revenues	788 490 385	1 611 951 771	2 444 316 195	2 444 316 195	52%	1 540 506 636	1 397 598 406

TABLE 3 – BUDGET OUTTURN AND CANCELLATION OF APPROPRIATIONS

Budget Outturn	2019	2020	2021
Revenue actually received	768 428 717	933 544 633,22	1 869 758 771,43
Payments made	- 554 790 908	- 782 887 409,39	- 1 608 252 838,77
Carry-over of appropriations	- 650 708 319	- 796 429 983,64	- 1 052 043 945,27
Cancellation of appropriations carried over	87 477	99 575,90	177 030,53
Adjustment for carry-over of assigned revenue appropriations from previous year	87 477	645 646 090,38	790 538 012,61
Exchange rate differences	- 6 954	71 648,30	- 236 951,00
Adjustment for negative balance from previous year			
Total:	207 189,17	44 554,77	- 59 920,47

Annex III: Human Resources - Quantitative

The figures in the following tables follow the conclusion of discussions on the Draft Budget 2022 and reflect the Agency's needs for resources to carry out the activities currently assigned to its responsibility. The figures are subject to change once the new regulatory framework is in place.

The Agency relies on an increased number of Contract Agents, in comparison to the Legislative Financial Statement, but under valid justification and in consultation with the Commission. Following the agreement reached with the Commission, the Agency will gradually and progressively reduce the number of CAs so that by no later than 2027 the total number of CAs aligns with that included in the legislative financial statement.

It is noted that the additional CAs (+31 in addition to 34 planned in the LFS) were recruited to both carry out and support core and delegated budget activities, for example concerning R&D activities (H2020, Horizon Europe), Fundamental Elements, PRS, non-EU EGNOS extensions etc.

The criteria used to identify the need of contract agents' positions are the following:

- keeping and further developing the expertise within the EUSPA in support of operational functions related to core & delegated activities;
- to reinforce capabilities in areas of work where a specific competence profile is needed for a limited period or where a long-term requirement has not yet been defined.

The Agency will continue to undertake critical reviews with regard to long-term resources planning in order to regularly assess and ensure consistent optimal allocation of human resources against priority needs and assigned tasks and responsibilities.

TABLE 1 – STAFF POPULATION AND ITS EVOLUTION; OVERVIEW OF ALL CATEGORIES OF STAFF

Statutory staff and SNE

Human Resources	2020			2021	2022	2023	2024
	Authorised Budget	Actually filled as of 31/12/2020	Occupancy Rate %	Authorised staff	Envisaged staff	Envisaged staff	Envisaged staff
Administrators (AD)	147	146	99,32	189	229	261	264
Assistants (AST)	3	4	133,33	2	2	2	2
Assistants/Secretaries (AST/SC)							
ESTABLISHMENT PLAN POSTS	150	150	100	191	231	263	266
Contract Agents (CA)	34	62	182,35	34	50	52	50
Seconded National Experts (SNE)	2	7	350	13	14	15	15
TOTAL STAFF	186	219	117,74	238	295	330	331

Additional external staff expected to be financed from grant, contribution or service-level agreements

Human Resources	2021	2022	2023	2024
	Envisaged staff	Envisaged staff	Envisaged staff	Envisaged staff
Contract Agents (CA)				
Seconded National Experts (SNE)				
TOTAL				

Other Staff

- Structural service providers

	Actually filled as of 31/12/2020
Security ³⁶	84
IT	29
GNSS programmes	56

³⁶ Includes local security, GSMC and operational security.

Corporate services	44
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- Interim workers

	Actually filled as of 31/12/2020
Number	8

TABLE 2 – MULTI -ANNUAL STAFF POLICY PLAN (2022 – 2024)

Function group and grade	2020				2021		2022		2023		2024	
	Authorised Budget		Actually filled as of 31/12		Authorised budget		Envisaged		Envisaged		Envisaged	
	Permanent posts	Temporary posts	Permanent posts	Temporary posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts	Perm Posts	Temp posts	Per m. posts	Temp. posts
AD 16												
AD 15												
AD 14		1		1		1		1		1		1

Function group and grade	2020				2021		2022		2023		2024	
	Authorised Budget		Actually filled as of 31/12		Authorised budget		Envisaged		Envisaged		Envisaged	
	Permanent posts	Temporary posts	Permanent posts	Temporary posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts	Perm. Posts	Temp posts	Per m. posts	Temp. posts
AD 13		3		2		5		6		7		7
AD 12		8				10		10		12		12
AD 11		9		7		12		17		20		20
AD 10		16		11		21		26		29		30
AD 9		27		20		36		45		52		53
AD 8		46		32		55		62		68		69
AD 7		27		46		34		44		50		50
AD 6		4		17		8		10		12		12
AD 5		6		10		7		8		10		10
AD TOTAL		147		146		189		229		261		264
AST 11												
AST 10												
AST 9												
AST 8										1		1

Function group and grade	2020				2021		2022		2023		2024	
	Authorised Budget		Actually filled as of 31/12		Authorised budget		Envisaged		Envisaged		Envisaged	
	Permanent posts	Temporary posts	Permanent posts	Temporary posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts	Perm. Posts	Temp. posts	Perm. posts	Temp. posts
AST 7						1		1		1		1
AST 6		1		1		1		1				
AST 5		2		1								
AST 4				1								
AST 3				1								
AST 2												
AST 1												
AST TOTAL		3		4		2		2		2		2
AST/SC 6												
AST/SC 5												
AST/SC 4												
AST/SC 3												
AST/SC 2												
AST/SC 1												

Function group and grade	2020				2021		2022		2023		2024	
	Authorised Budget		Actually filled as of 31/12		Authorised budget		Envisaged		Envisaged		Envisaged	
	Permanent posts	Temporary posts	Permanent posts	Temporary posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts	Perm. posts	Temp. posts
AST/SC TOTAL												
TOTAL		150		150		191		231		263		266
GRAND TOTAL	150		150		191		231		263		266	

- External personnel**

Contract Agents

Contract agents	Authorised 2020	Recruited as of 31/12/2020	Authorised 2021	Estimate 2022
Function Group IV	23	50	23	40
Function Group III	7	11	7	9
Function Group II	4	1	4	1
Function Group I				

Contract agents	Authorised 2020	Recruited as of 31/12/2020	Authorised 2021	Estimate 2022
TOTAL	34	62	34	50

Seconded National Experts

Seconded National Experts	Authorised 2020	Recruited as of 31/12/2020	Authorised 2021	Estimate 2022
TOTAL	2	7	13	14

TABLE 3 - RECRUITMENT FORECASTS FOR 2022 FOLLOWING RETIREMENT/MOBILITY OR NEW REQUESTED POSTS (INFORMATION ON THE ENTRY LEVEL FOR EACH TYPE OF POSTS:

INDICATIVE TABLE)

Job title in the Agency	Type of contract		TA/Official	CA Recruitment Function Group (I, II, III or IV)
	(Official, TA or CA)		Function group/grade of recruitment	
(cf examples below)	Due to foreseen retirement/mobility	New post requested due to additional tasks	Internal (Brackets) and external (single grade) foreseen for publication*	
System Engineer		6 TAs	AD7-AD8 (internal) AD7 external	
Service Engineer		4 TAs	AD7-AD8 (internal) AD7 external	
Security Engineer		7 TAs	AD7-AD8 (internal) AD7 external	
Market Officer		4 TAs	AD6-AD7 (internal) AD6 external	
Project Control Officer		4 TAs	AD5-AD6 (internal) AD5 external	
GSMC Engineering Officer		1 TA	AD6-AD7 (internal) AD6 external	
HR Officer		1 TA	AD5-AD6 (internal) AD5 external	
ICT Manager		2 TAs	AD6-AD7 (internal) AD6 external	
Legal Officer		3 TAs	AD5-AD6 (internal) AD5 external	
Financial Officer		1 TA	AD6-AD7 (internal) AD6 external	
Security Accreditation Officer		1 TA	AD7-AD8 (internal) AD7 external	

Job title in the Agency (cf examples below)	Type of contract (Official, TA or CA)		TA/Official Function group/grade of recruitment	CA Recruitment Function Group (I, II, III or IV)
	Due to foreseen retirement/mobility	New post requested due to additional tasks	Internal (Brackets) and external (single grade) foreseen for publication*	

* indication of both is required

* indication of both is required

Number of inter-agency mobility 2020 from and to the Agency: 0

Annex IV: Human Resources - Qualitative

A. RECRUITMENT POLICY

The Agency employs temporary agents (TAs), contract agents (CAs) and seconded national experts. The Agency does not employ officials.

Employment and selection procedures for Temporary Agents and Contract Agents are governed by the Staff Regulations and the respective implementing rules. Seconded National Experts are seconded to the Agency and remain in employment of their seconding organisation while working at the Agency.

Since 2019, the Agency uses a e-Recruitment tool to streamline and increase efficiency of the selection processes. The tool allows candidates to create their own profile and to manage their applications for relevant procedures. The tool is used for vacancies published externally for temporary agents, contract agents and trainees.

Recruitment procedures for temporary and contract agents include the following steps:

- publication of vacancy notices on the Agency website via the Agency e-Recruitment tool. Wide, tailor-made dissemination takes place to attract quality candidates from the relevant sector. Vacancy notices are also disseminated internally and sent to all other EU institutions and agencies, as well as to Administrative Board members. Wide, tailor-made dissemination takes place to attract quality candidates. The vacancy notices state the eligibility and selection criteria and indicate type and duration of contract and recruitment grade;
- setting up a selection board which includes the representative of the team where the future staff member will work, the administration and staff committee. For highly specialised posts, the Agency might request the assistance of external members;
- pre-selection of candidates based on the application forms submitted online via the e-Recruitment tool. In some selected procedures video interviewing tool will be used as a second screening allowing validation of candidates' technical knowledge and other selection criteria;
- selected candidates are invited to written test and interview which cover the specific competences, behavioural competences and language abilities as indicated in the vacancy notice;

- the selection board prepares a final report with a proposed shortlist of successful candidates which is sent to the authority authorised to conclude contracts of employment (AACC). A reserve list or list of suitable candidates is established by the AACC;
- for TAs and key positions, additional interview(s) with the AACC are scheduled. In the case of management positions, an additional assessment of management capacities by external HR consultants is required;
- the final decision on the appointment of successful candidate to the post is signed by the AACC.

Implementing rules in place

		Yes	No	If no, which other implementing rules are in place
Engagement of CA	Model Decision C(2019)3016	√		
Engagement of TA	Model Decision C(2015)1509	√		
Middle management	Model decision C(2018)2542	√		
Type of posts	Model Decision C(2018)8800	√		

The established recruitment grades (internal, inter-agencies and external selection procedures) for the key functions of temporary agents are listed in the table below, which is based on the GSA Decision of 28 June 2019 on types of post and post titles in the European GNSS Agency:

Type of post	Function group / Grade	Post title
Head of Unit or equivalent	AD 9 – AD 11 (exceptionally AD 12)	Head of Unit Head of Department Head of Task Force
Administrator	AD 5 – AD 8 (exceptionally AD 9)	Post titles established in the Agency to perform administrator functions: e.g. Engineer, Senior Engineer, Officer

Assistant	AST 1 – AST 4	Assistant, Project Assistant
Secretary/Clerk	SC 1 – SC 2	Secretary/Clerk

Although the Agency carefully evaluates all options so as to recruit only strictly at the necessary grade levels, in some cases, the recruitment of senior technical and specialised experts might be set above the lowest entry grades due to the labour market limitations.

In fact, in order to fill some crucial positions, the Agency must recruit senior specialised experts with a minimum of nine years work experience. As profiles with specific competencies are quantitatively scarce in the labour market, the Agency must compete as an employer with the attractive employment conditions offered by both the private space industry and national space authorities. Experts are requested to deal with industry and institution specialists at the same level of expertise.

The Agency also employs technically qualified staff in support functions within the corporate services departments. It is of the utmost importance to meet the Agency's objectives to recruit staff with broad knowledge and experience in their respective fields of work.

In any case, the Agency expects recruitment of technical experts at grade AD9 – 12 to remain within the limits of 20% of all recruitments per year (averaged over five years).

Temporary agents are typically offered a contract of maximum five years, renewable for another time-limited period not exceeding five years. Second renewal is for an indefinite period. All renewals of contract are subject to thorough examination of the performance of the staff member and depend on the Agency's work programme, priorities, and available budgetary provisions.

Contract Agents

The Agency foresees continuing reliance on a significant number of Contract Agents, in comparison with the Legislative Financial Statement, but under valid justification and in consultation with the Commission. The Agency has agreed with the Commission on a gradual and progressive reduction in the total number of CAs so that the total number of CAs aligns with that included in the legislative financial statement by no later than 2027.

It is important to stress that the Agency is fully committed to the efficient use of its resources and re-assess their allocation annually to ensure that staff are assigned to priority areas.

Contract agents are typically offered time-limited contracts of five years. Contracts are renewable once for another time-limited period of five years consistent with the Agency's needs, priorities and available budget. If a second renewal is granted, it will be for an indefinite period.

Seconded National Experts

In 2020, seven Seconded National Experts were employed at the Agency within the Security, Security Accreditation, Galileo Security Monitoring Centre, Galileo and Market Development departments, in line with the rules on secondment to the Agency adopted by the Administrative Board 37.

The Agency highly values the expertise of the Seconded National Experts. Efforts have been made to promote this opportunity with Member States. In 2019, an open-ended call has been published covering all possible areas of the Agency tasks.

Structural Service Providers

Outsourcing has been thoroughly considered by the Agency and implemented whenever necessary and allowed by the budget. Structural service providers are contracted through open tender procedures and subsequent framework contracts. The Agency has several external consultants working in various areas, including in the Galileo and EGNOS Services Departments, Security and Market Development. Parts of the corporate services such as Facilities, Logistic and ICT functions are also supported by external service providers.

The Agency's request for additional resources is partially linked to the need to internalise some of the tasks currently carried out by external service providers. It is necessary to retain expertise that is considered crucial for the organisation.

Short-term functions may also be temporarily filled with 'interim agents' (staff engaged by an external agency that have been awarded a framework contract), especially to:

³⁷ Decision GSA-WP-24, rules on the secondment to the Agency of national experts and national experts in professional training.

- Temporarily replace staff who are absent due to maternity or parental leave, sickness or other reasons;
- Cope with temporary peak periods that require additional workforce for a fixed period;
- Handle projects and/or tasks on a temporary basis that require specific competencies not available within the Agency;
- Temporarily assist with different events, meetings and workshops organised by the Agency.

B. APPRAISAL OF PERFORMANCE AND RECLASSIFICATION/PROMOTIONS

Table 1 - Reclassification of temporary staff/promotion of officials

	Average seniority in the grade among reclassified staff						
Grades	Year N-4 2017	Year N-3 2018	Year N-2 2019	Year N-1 2020	Year N 2021	Actual average over 5 years (see explanations below the table)	Average over 5 years (Annex IB SR)
AD05		2.33	3.60	2.00		2.64	2.8
AD06	3.33	2.46	2.98	2.40		2.79	2.8
AD07	3.21	3.98	3.05	2.67		3.23	2.8
AD08	3.39	3.99	2.00	3.90		3.32	3
AD09	3.94	3.52	2.50	3.07		3.26	4
AD10	3.46		2.84	3.00		3.10	4
AD11		3.84				3.84	4
AD12		4.00				4.00	6.7

	Average seniority in the grade among reclassified staff						
Grades	Year N-4 2017	Year N-3 2018	Year N-2 2019	Year N-1 2020	Year N 2021	Actual average over 5 years (see explanations below the table)	Average over 5 years (Annex IB SR)
AD13							6.7
AST1							3
AST2							3
AST3							3
AST4							3
AST5		5.83				5.83	4
AST6							4
AST7							4

	Average seniority in the grade among reclassified staff						
Grades	Year N-4 2017	Year N-3 2018	Year N-2 2019	Year N-1 2020	Year N 2021	Actual average over 5 years (see explanations below the table)	Average over 5 years (Annex IB SR)
AST8							4
AST9							-
AST10 (Senior assistant)							4
AST/SC1	n/a	n/a	n/a	n/a	n/a	n/a	4
AST/SC2	n/a	n/a	n/a	n/a	n/a	n/a	5

	Average seniority in the grade among reclassified staff						
Grades	Year N-4 2017	Year N-3 2018	Year N-2 2019	Year N-1 2020	Year N 2021	Actual average over 5 years (see explanations below the table)	Average over 5 years (Annex IB SR)
AST/SC3	n/a	n/a	n/a	n/a	n/a	n/a	5.9
AST/SC4	n/a	n/a	n/a	n/a	n/a	n/a	6.7
AST/SC5	n/a	n/a	n/a	n/a	n/a	n/a	8.3

Explanations:

* Average over 4 years

** Where, in a given grade, the number of reclassifications over the reference period is equal to or less than three, that average may be lower. In some cases (orange colour) we reclassified equal or less than 3 staff members.

Other remarks:

- 1) Average should be calculated over 5 years period (2016-2020). While data shown above refers to 2017-2021 (a 4 years period).
- 2) Annex IB SR is linked to multiplication rates and not to average seniority.

Table 2 - Reclassification of contract staff

Function Group	Grade	Staff in activity at 1.01.2019	How many staff members were reclassified in Year 2020	Average number of years in grade of reclassified staff members	Average number of years in grade of reclassified staff members according to decision C(2015)9561
CA IV	17				Between 6 and 10 years
	16	6			Between 5 and 7 years
	15	8	1	2.00	Between 4 and 6 years
	14	16	4	2.04	Between 3 and 5 years
	13	14	5	2.35	Between 3 and 5 years
CA III	11	1			Between 6 and 10 years
	10	1	1	3.00	Between 5 and 7 years
	9				Between 4 and 6 years
	8				Between 3 and 5 years
CA II	6				Between 6 and 10 years
	5	3			Between 5 and 7 years
	4				Between 3 and 5 years
CA I	2				Between 6 and 10 years
	1				Between 3 and 5 years

Other remarks:

- 1) *Average should be calculated over 5 years period (2016-2020). while data shown above refers to 2017-2021 (a 4 years period).*

Annual performance appraisal and reclassification assessments are performed in accordance to Articles 15 and 87 of the Conditions of Employment of Other Servants of the EU (CEOS) and the respective implementing rules. All staff members are assigned individual annual objectives, aligned with the Agency's high-level objectives, including performance indicators for each objective. Staff members are subsequently appraised on the basis of these objectives and KPIs the following year. The process also includes a proposal for further professional development.

C. MOBILITY POLICY**Mobility within the Agency**

As the Agency continues to grow, it looks to attract the best-qualified applicants from various backgrounds. To do this, it predominantly publishes vacancy notices externally. However, the internal publication of vacancies or reassignments are also used as instruments for re-deploying staff internally and for career development purposes.

In 2020, two staff members were assigned to new posts by means of internal mobility, maintaining continuity of contracts in line with Article 12(2) of the implementing rules TA 2(f). Nine staff members were reassigned following operational priorities.

Mobility among agencies

The Agency has not filled any posts by means of mobility between EU agencies but aims to strengthen the promotion of the inter-agency mobility in the future. Four staff members who left the Agency in 2020 went on to new employment opportunities in other EU Agencies and two temporary agents moved to the Agency from another EU Agency.

D. GENDER AND GEOGRAPHICAL BALANCE

The figures shown in this section reflect the situation as of December 2020.

D.1 Gender Balance- Table 1 - Data on 31/12/2020.

		Official		Temporary		Contract Agents		Grand Total	
		Staff	%	Staff	%	Staff	%	Staff	%
Female	Administrator level			33	16.10%			33	16.10%
	Assistant level (AST & AST/SC)			4	1.95%			4	1.95%
	Total			37	18.05%	30	14.63%	67	32.68%
Male	Administrator level			108	52.68%				
	Assistant level (AST & AST/SC)			0	0%				
	Total			108	52.68%	30	14.63%	138	67.32%
Grand Total				145	70.73%	60	29.27%	205	100%

The specific technical labour market in which the Agency operates shows a predominant proportion of men. This specific characteristic makes it difficult for the Agency to achieve a balanced gender distribution. The Agency is fully committed to the provision of equality of opportunity for all employees through its employment practices, policies and procedures, and gender equality is established as one of the Agency's values. This value is included in performance assessment as a means to promote gender equality competence for managers and staff. In this way, managers and staff are reminded to contribute to bringing the organisation and all its activities in line with the objective of gender equality. All Agency boards and committees, including recruitment selection boards and joint reclassification committees, are composed with attention towards gender balance. All vacant posts are advertised containing statements regarding the Agency's practices as an equal opportunity employer. The Agency ensures that

no employee or job applicant is treated unequally due to gender, marital or parental status, age, sexual orientation, disability, citizenship or religious belief with regard to recruitment and selection, training or opportunity for career development. Applicants are considered only on the basis of their relevant experience and competencies. In cases of candidates presenting equal merit in a selection procedure, the Agency will give priority to the underrepresented gender or nationality. The Agency is committed to continuously raising the awareness of staff and managers on the asset that a diverse workforce represents.

Table 2 - Data regarding gender evolution over 5 years of the Middle and Senior management

	2015		2020	
	Number	%	Number	%
Female Managers	2	16.67%	6	40.00%
Male Managers	10 (ED included)	83.33%	9 (ED included)	60.00%
TOTAL	12	100.00%	15	100.00%

With regards to reconciling professional and personal life and respectful working environment, a range of measures are in place. These measures focus on teleworking, the possibility of using flexi-time, support to multilingual tuition, a policy to protect the dignity of the person and to prevent psychological and sexual harassment, and initiatives related to well-being at work.

D.2 Geographical Balance

Table 1- Data on 31/12/2020

Nationality	AD + AC FG IV		AST/SC- AST + CA FGI/CA FGII/CA FGIII		TOTAL	
	Number	% of Total Staff members in AD and FG IV categories	Number	% of Total Staff members in AST SC/AST and FG I, II and III categories	Number	% of total staff
Austria	1	0.49%			1	0.49%
Belgium	7	3.41%	3	1.46%	10	4.88%
Bulgaria	5	2.44%			5	2.44%
Croatia	1	0.49%			1	0.49%
Cyprus					0	0.00%

Czech Republic	24	11.71%	6	2.93%	30	14.63%
Denmark	1	0.49%	1	0.49%	2	0.98%
Estonia					0	0.00%
Finland	1	0.49%			1	0.49%
France	30	14.63%	2	0.98%	32	15.61%
Germany	2	0.98%			2	0.98%
Greece	13	6.34%	1	0.49%	14	6.83%
Hungary	1	0.49%			1	0.49%
Ireland	2	0.98%			2	0.98%
Italy	30	14.63%	1	0.49%	31	15.12%
Latvia					0	0.00%
Lithuania					0	0.00%
Luxembourg					0	0.00%
Malta	2	0.98%			2	0.98%

The Netherlands	2	0.98%			2	0.98%
Poland	6	2.93%			6	2.93%
Portugal	2	0.98%			2	0.98%
Romania	16	7.80%	1	0.49%	17	8.29%
Slovakia	4	1.95%			4	1.95%
Slovenia	2	0.98%			2	0.98%
Spain	34	16.59%			34	16.59%
Sweden	1	0.49%			1	0.49%
United Kingdom	1	0.49%	2	0.98%	2	1.46%
TOTAL	188	91.71%	17	8.29%	205	100.00%

Table 2 - Evolution over 5 years of the most represented nationality in the Agency

Most represented nationality	2015		2020	
	Number	%	Number	%
Spain	21	16.41%	34	16.59%
France	21	16.41%	32	15,61%

E. SCHOOLING

Agreement in place with the European School(s): n/a				
Contribution agreements signed with the EC on type I European schools			No	
Contribution agreements signed with the EC on type II European schools	Yes	2		
Number of service contracts in place with international schools:	25			
Description of any other solutions or actions in place: (see below)				

Prague does not currently benefit from an accredited European School, which is why the Administrative Board adopted a social measure supporting multilingual tuition for staff. A similar situation applies to staff located at the GSMC in Spain (Madrid, incl. the GNSS Service Centre).

To date, the Agency has concluded 19 direct agreements with international schools in Prague, Czech Republic, including:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Prague British International School s.r.o. • Czech British School s.r.o. • Park Lane International School a.s. • Riverside School • International Montessori School of Prague s.r.o. • International School of Prague s.r.o • Lycée Français de Prague • Německá škola v Praze s.r.o (Deutsche Schule Prag) | <ul style="list-style-type: none"> • Mateřská škola b fresh s.r.o. • Mateřská škola Duhovka, s.r.o. • Soukromá základní Škola Hrou, s.r.o. • Bambino Pre-school • The Little Mole International Preschool of Prague • 3 P'tites Pommes • MS KIDS Company • Villaluna • Cocoon baby • Global preschool • Florentinum |
|--|--|

The Agency concluded seven direct agreements with international schools in proximity to Saint-Germain-en-Laye, France:

- The British School of Paris
- The Forest International School
- Ecole Montessori Bilingue de Rueil Malmaison
- Montessori School of Saint-Germain-en-Laye
- Ecole des Orchidées
- iDSP, The International German School
- Ecole Suger

A new accredited European School in Courbevoie, in Paris - La Défense area has become partially operational as of September 2019. The process of accreditation is still ongoing and full accomplishment is foreseen in spring 2021. The Agency has signed the amendment of the Mandate and Service level Agreement with the European Commission, which enables the priority access to the European School, to the children of the Agency GSMC staff.

The Agency concluded one direct agreement with a school in proximity to Madrid, Spain:

- Runnymede College

Following the opening of the Galileo Reference Centre (GRC) in The Netherlands, the Agency entered into a Mandate Level agreement with the European Commission for use of the accredited European School (type II) in proximity to Noordwijk, The Netherlands:

- Rijnlands Lyceum.

In total, during the 2019/2020 scholastic year, 64 Agency staff members benefited from the social measure, and the Agency covered the educational cost of 120 children.

Annex V: Buildings

	Prague	Comments
Surface area (in square metres)	14 176.68	
of which office space	6 114	The estimated occupancy of the office space in Prague at the end of 2020 exceeds 90 %

of which non-office space	4 592.77	This is the area currently used by the Agency – meeting rooms, social rooms, storage, technical areas, corridors and open areas
Technical areas (HVAC technologies)	3 469.91	This is under the responsibility of the building owner
Annual rent (EUR)	208 220 in 2019	The maximum estimated yearly rent between 2021 and 2023 shall be 210 000 EUR p.a.
Type and duration of rental contract	Indefinite	
Host country grant or support		The Agency pays 25 % of commercial rent and pays 100 % of its utility's consumption

	Prague – Building 2	Comments
Surface area (in square metres)		
of which office space		UNDER NEGOTIATION
of which non-office space		
Technical areas (HVAC technologies)		
Annual rent (EUR)		
Type and duration of rental contract	Indefinite	
Host country grant or support		

	France (Toulouse)	Comments
Surface area (in square metres)	309	
of which office space	252	
of which non-office space	57	
Annual rent (EUR)	81 916	2019
Type and duration of rental contract	Indefinite	The contract is renewed yearly

	France (Saint-Germain-en-Laye) B123	Comments
Surface area (in square metres)	813	
of which office space	282	Estimated occupancy of the office space is around 150 % (221 + 61 in Faraday Cage)
of which non-office space	383	103 of equipment room
Technical areas (HVAC technologies)	192	
Annual rent (EUR)	40 000	
Type and duration of rental contract	Ends on 31 December 2030	

	France (Saint-Germain-en-Laye) – BUILDING 2	Comments
Surface area (in square metres)	4544	UNDER DEVELOPMENT

of which office space	1037	
of which non-office space	1930	
Technical areas (HVAC technologies)	564	
Annual rent (EUR)	ongoing discussions with France	
Type and duration of rental contract	Hosting Agreement between France, European Commission and Agency in force until Dec 2030 with automatic renewal for another 20 years. Amendment expected to address the Final Configuration.	Estimated delivery Q3 2022
Spain (La Maranosa) E2		
Surface area (in square metres)	1394	The size of the whole building is 2168,13
of which office space	140	
of which non-office space	958	HVAC, Electricity, Fire, Security systems, Sanitary & corridors...
Annual rent (EUR)	N/A	In-kind contribution by Spain
Type and duration of rental contract	Hosting Agreement between Spain, European Commission and Agency In force for 20 years after signature with automatic renewal for another 20 years	

Spain (La Maranosa) E6		
Surface area (in square metres)	2737	UNDER DEVELOPMENT
of which office space	250	
of which non-office space	2487	1617 m ² OPE OPS/EQT, VAL OPS/EQT, storage 387 m ² HVAC, Electricity, Fire, Security systems, etc. 483 m ² Sanitary & corridors
Annual rent (EUR)	N/A	In-kind contribution by Spain
Type and duration of rental contract	Hosting Agreement between Spain, European Commission and Agency In force for 20 years after signature with automatic renewal for another 20 years.	Estimated delivery Q3/2021

Belgium (Brussels)		
Surface area (in square metres)	21	
Of which office space	21	
Of which non-office space		
Annual rent (EUR)	18 000	2021
Type and duration of rental contract	Indefinite	The contract is renewed yearly

Annex VI: Privileges and Immunities

Agency privileges	Privileges granted to staff Protocol of privileges and immunities/diplomatic status	Education/day care
All privileges and immunities provided for in Protocol 7, such as exemption from all direct taxes (Article 3), exemption from custom duties, prohibitions and restrictions on imports and exports (Article 4), secret of communication and correspondence (Article 5).	All privileges and immunities provided for in Protocol 7, such as: laissez-passer (Article 6), direct tax exemption, currency exchange redemptions, import/export redemptions for furniture and vehicles, exemption from immigration restrictions (Article 11).	
In addition, in the Czech Republic, the Agency enjoys VAT exemption for: local purchases higher than 4 000 CZK; for intra-Union purchases as per Directive 2006/112/EC and or intra-Union consignments of goods as per 2008/118/EC (Hosting Agreement with the Czech Republic, Article 9).	The Executive Director enjoys, irrespective of nationality, the privileges, immunities, exemptions and facilities necessary to perform all duties and functions of his/her office. The Director shall be treated as a diplomatic agent of comparable rank, in accordance with the norms of international law. Any members of the Director's family shall enjoy the same privileges, immunities, exemptions and facilities.	
Exemption from contributions to social security schemes and compulsory insurance (Hosting Agreement with the Czech Republic, Article 11, Hosting agreement with France, Article 13 bis, Hosting agreement with Spain, Article 18).	In addition, exemption from social security scheme contribution in France (Hosting Agreement with France Article13 bis), in Spain ((Hosting Agreement with France Article18) and Czech Republic (Hosting Agreement with Czech Republic Article13c).	
Further, the Agency enjoys immunities from national criminal, administrative, civil jurisdiction (Hosting Agreement with Czech Republic, Article 8, Hosting agreement with France, Articles 7 and 8, Hosting agreement with Spain, Articles 7 and 8).	Further, in Czech Republic the Agency Staff enjoys VAT exemption: up to 100 000 CZK for local purchases higher than 4 000 CZK; for vehicle acquisition every three years Hosting Agreement with Czech Republic Articles 5 and 7).	
	Also, Agency Staff enjoys immunity from jurisdiction in France (Article 17), in Spain (Article 14) and the Czech Republic (Article13).	

Annex VII: Evaluations

The Internal Control function is embedded into operational departments. Each operational department has specific staff to perform the appropriate ex-ante and ex-post controls (depending on the business objective). For example, within the Market Development Department, grant management is controlled by a joint team with the Finance Department. Likewise, Project Control is responsible for the control functionalities of EGNOS and Galileo as part of its activities.

The Agency's Internal Control Coordinator (ICC) exercises a "coordination and reporting" role in relation to both internal controls executed by operational departments and external controls or audits from auditors representing key stakeholders. The Administration department directly handles the relationship with the Court of Auditors and the internal auditor from DG DEFIS, and the European Parliament, through the Coordination of EU Agencies (EUAN), keeping ICC informed.

The ICC coordinates interactions and controls addressing requests from:

- The Agency Internal Audit Capability
- The Commission's Internal Audit Service
- External auditors, hired by ICC to perform corresponding audits under Delegation Agreements for the benefit of the Commission's Directorate for Defence and Space (DG DEFIS), and ESA Working Arrangement if/when required
- DG DEFIS' Internal Control Coordination

The ICC coordinates the execution of ex-posts/actual controls. Audits are primarily performed by the European Court of Auditors, the Agency's Internal Audit Capability, the Commission's Internal Audit Service, and external auditors (for DG DEFIS), and DG DEFIS internal auditors.

On the basis of the risk assessment executed by the Commission's Internal Audit Service and condensed in its Strategic Internal Audit Plan (IAS Agency SIAP 2018-2020) for the Agency, the audits for the period 2018-2020 were executed in relation to major processes or operations (IT Governance in 2018, exploitation of EGNOS in 2019 Galileo were audited in 2019-20). Other important potential IAS audit topics are horizontal processes (i.e. IT Security, Human Resources Management, including ethics and fraud awareness) and possibly Market Development's Market Report and User Consultation Platform. For 2021 and beyond, the Commission's Internal Audit Service will have to launch another

comprehensive risk assessment of the Agency and, consequently, a Strategic Internal Audit Plan (IAS Agency SIAP for 2021-2023).

The Agency's Internal Audit Capability (IAC) prepares an annual audit plan that is discussed and approved by the Executive Director and the Administrative Board. The Agency is considering that IAC supports the definition of the Agency's control strategy in 2021, and possibly beyond, acknowledging its enhanced operational scope. Other activities will be decided in due course.

The Administrative Board is informed about reports from the Commission's Internal Audit Service (IAS Agency SIAP risk assessments and individual annual audit reports), Internal Audit Capability (annual audit plan, individual audit reports, and annual audit review reports explaining the degree of implementation of audits' recommendations).

INFORMATION, REPORTING AND RECORDS

Information about audit records is systematically recorded, monitored and reported to management and made available on the Agency's intranet, although access is restricted to a need-to-know basis.

Several other Commission intranet operational or audit record sites are developed or used for specific purposes such as Internal Audit Service Issue Track for periodic audit recommendations or in relation to such operational topics as, for example, the H2020 grant management databases.

Annex VIII: Risk Management 2022

The key risks for 2022 are defined with the assumption that the Agency's main operational objectives are:

- Operate the EGNSS systems and ensure continuity of service at a high-level of performance
- Steer the evolution of the ground segment in accordance with programme objectives
- Continue deployment, incorporate new satellites and ensure their successful integration into service operations
- Implementation of GOVSATCOM
- Promote adoption in the market of Copernicus services
- Ensure the definition of new/extended services and supervise new versions of the systems

At the time of writing, the top risks below are being managed at the corporate level. These are listed in no specific order of priority (these may potentially impact the achievement of the above-mentioned objectives):

- Achievement of Full Service
- Robustness and resiliency in the Agency ICT systems
- Disruption to continuity of business critical activities because of COVID-19
- Degradation of operational capacity at headquarters due to the lack of physical capacity of the current building

Countermeasures taken to reduce or eliminate risks are made up of a set of mitigation actions identified and implemented through the corporate risk management process.

Management of these corporate risks is undertaken through a quarterly Agency corporate risk management board.

Annex IX: Procurement Plan 2022

The procurement plans for the year are provided in this section and are split by activity. The sequence mirrors the structure of Section III. In each case, the legal basis for procurement is the EU Space Programme Regulation. Information related to delegated tasks is available in Annex XI.

Please note that all launch dates and budgetary figures are indicative.

IX.01 SECURITY ACCREDITATION (WBS 2.04, 2.05, 2.06)

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
1,3,4,5,6,7	Support services to independent reviews of security accreditation documentation	Q1-Q2	450 000	Specific Contract	1-3
5,6	SAB Accreditation Compliance Framework and Implementation	Q1-Q2	300 000	Specific Contract	1-3
5,7	New procurements/grants or amendment to existing ones	Q2-Q3	250 000	Specific Contract, other procurements	1-3

* New procurement procedure may need to be launched during 2021.

IX.02 OPERATIONAL SECURITY OF EGNSS COMPONENTS (VARIOUS WBS)

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
1,2,3,4	Operational security	Q1-Q2	12 250 000	Specific contract	5

IX.03 PUBLIC REGULATED SERVICE (PRS) ACTIVITIES (WBS 2.03)

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
1,4	Implementation of PRS Article 14c	Q1-Q2	500 000	Specific contract	1

In-line with Decision 1104/2011/EU, objectives and activities aimed at supporting or providing technical assistance to Member State CPAs or other entities are supposed to be financed by the Member States or entities requesting the relevant services. This should be done through the mentioned specific agreements.

IX.04 GSMC OPERATIONS & PREPARATION (WBS 4.06)

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
IX.03.1	Security support services	Q3/2021	2 200 000	Specific contract	1
IX.03.2	Security monitoring services	Q1/2021	300 000	Specific contract	1

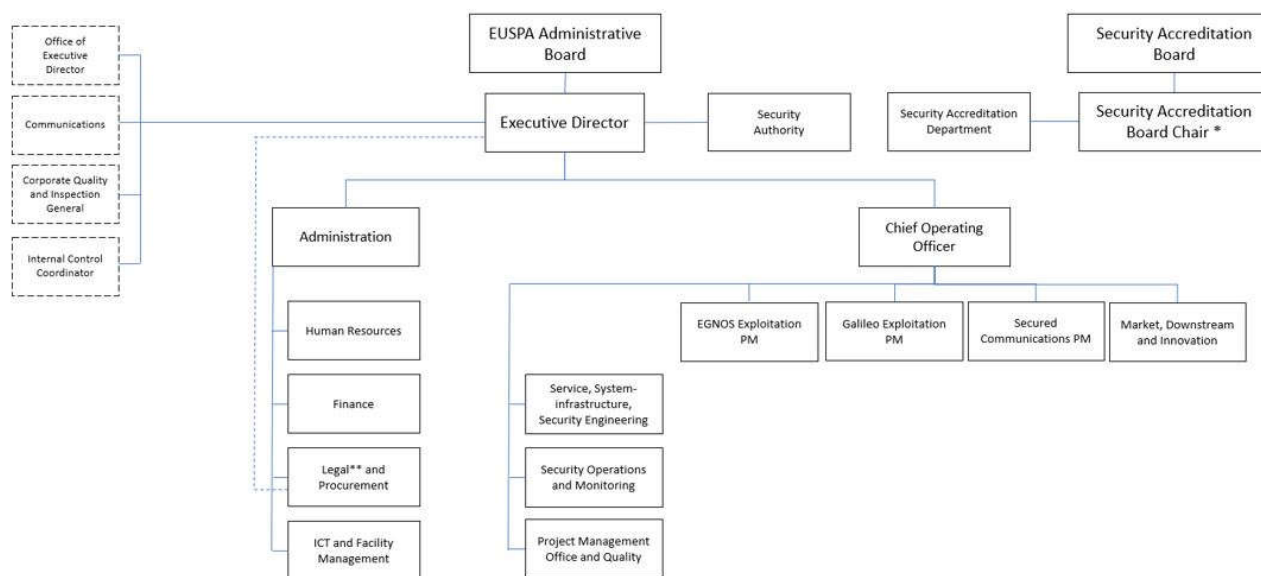
IX.05 PROMOTION AND MARKETING OF THE SERVICES (WBS 5.02, 5.03, 1.03.01)

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
1,2,3,4	EU Space components user segment and market development in Transport (Aviation, Road, Rail & Public transport, Marine & Ocean Monitoring).	Q2	550 000	Specific contracts*, other procurement, or prizes	5
5,6,8	EU Space components user segment and market development in high precision (Agriculture & Forestry, Urban Planning & Geomatics, Critical Infrastructures).	Q2	500 000	Specific contracts, other procurement, or prizes	5

Objective	Name	Launch Date	Budget (EUR)	Type of contract	Number of contracts
7	EU Space components user segment and market development in mass market.	Q3	400 000	Specific contracts, other procurement, or prizes	5
9, 14	EU Space components user segment and market development for Governmental and Space users.	Q2	400 000	Specific contracts, other procurement, or prizes	3
10,11,12,13	EU Space components user segment and market development in new segments (Environment & Air Quality, Energy, Natural Disaster & Emergency Response, Insurance & Finance).	Q2	500 000	Specific contracts, other procurement, or prizes	5
1-14	EU Space components market monitoring, user management and technology monitoring, (including cooperation with receiver manufacturers), education and training.	Q1	350 000	Specific contracts, other procurement, or prizes	5
1-15	Participation in/organisation of events, exhibitions, conferences, competitions both online, off line and hybrid	Q2	400 000	Contract	5
1-15	Web development and maintenance, video/multi-media production and supporting publications, media and public relations.	Q2-3	550 000	Contract	5
1-15	Awareness Raising Campaigns development and management (both online and online) targeted to different groups such as the general public, member states, stakeholders, service and application providers, industries and user communities.	Q2-3-4	450 000	Contract	4

Annex X: Organisation Chart 2022

The Agency organisation, presented below, is currently in place.



* In close cooperation with EUSPA ED in accordance with the Space Regulation Art 79

** Legal and procurement advise to the ED

Annex XI: Preliminary tasks delegated to EUSPA

XI.1 Galileo

I. Under the Contribution Agreement between European Commission and EUSPA for the space programme and Horizon Europe, to be signed according to the Framework Partnership Agreement between EC, EUSPA and ESA in line with Art. 28(4) of the EU Space Regulation³⁸, EUSPA is entrusted with the implementation of tasks pursuing following objectives and tasks for the period of its duration³⁹:

Objectives

OBJECTIVE-1: Ensure Galileo services provision;
OBJECTIVE-2: Ensure security of the Galileo Programme;
OBJECTIVE-3: Roll out new services or features anticipated in the Space Programme Regulation;
OBJECTIVE-4: Ensure development and deployment of Galileo Infrastructure evolutions;
OBJECTIVE-5: Support Commission international activities.

II. Tasks

- (a) The overall role of Galileo exploitation manager;
- (b) The management, operation, maintenance, continuous improvement, evolution and protection of the infrastructure, in particular ground based centres and stations referred to in Decision (EU) 2016/413 or (EU) 2017/1406, networks, including upgrades and obsolescence management;
- (c) The development of future generations of the systems and the evolution of the services provided by Galileo, without prejudice to future decisions on the Union financial perspectives, including by taking into account the needs of relevant stakeholders;
- (d) The support of certification and standardisation activities related to Galileo, in particular in the transport sector;
- (e) The continuous provision of the services provided by Galileo including the management of contingencies;
- (f) The cooperation with other regional or global satellite navigation systems, including to facilitate compatibility and interoperability;

³⁸ REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU

³⁹ The period during which EUSPA may enter into contracts, conclude grant agreements or award prizes for the implementation of the entrusted tasks is until 31 December 2028

(g) Elements to monitor the reliability of the systems and their exploitation, and the performance of the services;

(h) Support the Commission in the definition and implementation of the PRS uptake and technological roadmap;

(i) Other support tasks.

EUSPA shall entrust ESA with the roles of Design Authority and of System Development Prime for Galileo, and the respective tasks, stemming out of such roles, via the signature of a contribution agreement.

For the period from the signature of the EC-EUSPA contribution agreements until 31/12/2022, EUSPA plans the following activities for Galileo under the entrusted delegated budget:

Space programme regulation budget line: 3929					
Activity	Existing/new /contract/ agreement (if defined)	Type of financial instrument: procurement /grant	Indicative number of contracts/agreements/ amendments/exercising of options	Indicative timetable for publication /launch	Indicative funds set aside for the award of contracts (M€)
1 - Service and system in operations support	New	Procurement	7	2022-Q2, Q4	36
5 - LAUNCHERS	existing	Procurement	2	2022-Q3	TBC
6 - OPS and Maintenance	Existing and new	Procurement	19	2022-Q2 to Q4	53
7 - SERVICE CENTERS	Existing and new	Procurement	22	2022-Q2 to Q4	27
	New	Grants	23	2022-Q2 to Q4	22

		(% funding is TBD at this stage)	(beneficiaries: Industries, Universities, SMEs, Corporations, research institutes, non-profit national agencies, public bodies, including Member State organisations, international organisations)		
	New	Prizes	up to 50 (beneficiaries among natural persons or legal entities)	2022-Q3	0,75

XI.2 EGNOS

Under the Contribution Agreement between European Commission and EUSPA for the space programme and Horizon Europe, for the period of its duration⁴⁰, EUSPA is entrusted with the implementation of tasks perusing following objectives:

OBJECTIVE-1: Ensure EGNOS services provision;

OBJECTIVE-2: Ensure security of the EGNOS Programme;

OBJECTIVE-3: Develop new EGNOS services enabling new applications;

OBJECTIVE-4: Ensure EGNOS evolution;

OBJECTIVE-5: Support the Commission's international activities.

EUSPA shall entrust ESA with the roles of Design Authority and of System Development Prime for EGNOS, and the respective tasks, stemming out of such roles, via the signature of a contribution agreement.

⁴⁰ The period during which EUSPA may enter into contracts, conclude grant agreements or award prizes for the implementation of the entrusted tasks is until 31 December 2028

Activity	Existing/new/contract/agreement (if defined)	Type of financial instrument: procurement/grant/prize	Indicative number of contracts / agreements / amendments / options (procurements) Applicants targeted by the call for proposals (grants) Type of participants targeted by the contest (prizes)	Indicative timetable for publication /launch	Indicative funds set aside for the award of contracts (M€)
10.1 ESP Operations & Maintenance	Existing and new	Procurement	18	22S1	46.5
	New	Procurement	2	22S2	57.0
10.2 ESP GEO-1 to GEO-4	N/A	N/A	N/A	N/A	N/A
10.3 ESP GEO-5	N/A	N/A	N/A	N/A	N/A

10.4 Security support	N/A	N/A	N/A	N/A	N/A
10.5 System evolutions (including security (V3))	New	Procurement	2	22S2	10.0
10.6 Exploitation support services, enablers and user segment	New	Procurement	9	22S1	8.6
	New	Grant	Single applicants/consortia. Legal/natural persons in EU MS and CH/NO. National authorities, operators, infrastructure managers, user terminal manufacturers.	22S2	6.9
	New	Prize	Single applicants or teams. Entrepreneurs, start ups, SMEs.	22S1	0.3
10.8 ESA Remuneration	N/A	N/A	N/A	N/A	N/A
10.10 EGNOS extension	N/A	N/A	N/A	N/A	N/A
10.R Other actions/activities	N/A	N/A	N/A	22S1	11.0

XI.3 GOVSATCOM

Budget line 3931

Under the Contribution Agreement between European Commission and EUSPA for the Space programme and Horizon Europe, signed according to the Framework Partnership Agreement between EC, EUSPA and ESA in line with Art. 28(4) of the EU Space Regulation⁴¹, EUSPA is entrusted with the implementation of tasks pursuing the following high-level objectives for the period of its duration⁴².

The high-level objectives of activities included GOVSATCOM Work Plan and LTBP starting from 2021 are summarized as following:

- a) Based on the user-related aspects of GOVSATCOM, coordination of the service portfolio and the sharing and prioritisation of services, ensuring that the needs of the users are correctly considered in the design and operation of the GOVSATCOM component, monitoring the use, demand, and compliance with the operational user requirements, identify the need for service evolutions, perform analyses associated to the definition of the secure operational ground segment, provide support to the Commission with the aim to define the relevant implementing acts, ensure the coherence of the technical specifications of the GOVSATCOM infrastructure with the user operational requirements and the service portfolio implementing acts.
- b) Procurement of the secure operational ground segment (GOVSATCOM Hubs), EUSPA acts as contracting authority and manages the procurement of the development of secure operational ground segment (GOVSATCOM Hubs) and develops specific remote communication systems, terminals and software needed for the end-to-end secure services provision.
- c) Support in the definition of the relevant business, technical, legal and financial aspects, upon request the Commission on Service Level Agreements (SLAs) and implement SLAs upon request.
- d) Operate the GOVSATCOM Hubs either directly or through contractual and financial scheme most suitable to achieve the objectives of the GOVSATCOM Component as agreed with the Commission.
- e) Conduct security tasks related to GOVSATCOM. Assist the Commission in security tasks (risk and threat analysis, drafting the general security requirements in addition to other relevant security-related documentation, Programme Security Instruction and Security Classification Guide), draft

⁴¹ REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU

⁴² the period during which EUSPA may enter into contracts, conclude grant agreements or award prizes for the implementation of the entrusted tasks is until 31 December 2028

technical and operational requirements, comply with the GOVSATCOM security baseline and flow it down to the activities related to GOVSATCOM, propose security risk mitigation plans, propose evolutions of the security requirements baseline, prepare the security accreditation files, contribute to the security monitoring of the ground operations, manage and implement the operational security tasks related to the Hub(s).

- f) Support system and services evolution, including security aspects.
- g) Support to the implementation of the security aspects of the European quantum communication infrastructure (EuroQCI) as a possible building block of future GOVSATCOM evolutions.
- h) Coordinate the network of users and analyse their needs and requirements with the aim to build the user perspective and assess the trends of the market demand, extend the European GNSS User Consultation Platform to the area of satellite communications, perform market monitoring.

Space programme
regulation budget
line: 3931

For year 2022, EUSPA plans the following activities for GOVSATCOM under the entrusted delegated budget:

Table 1 – 2022 activities for GOVSATCOM under the entrusted delegated budget

Activity	Existing/new/contract/ agreement (if defined)	Type of financial instrument: procurement/grant/prize	Indicative number of contracts / agreements / amendments / options (procurements) Type of applicants targeted by the call for proposals (grants) Type of participants targeted by the contest (prizes)	Indicative timetable for publication/launch	Indicative funds set aside for the award of contracts (M€)
WP1 Support	New	Procurement	1	22S1	0,2
WP1 Support	New	Procurement	3	22S2	3,0

Activity	Existing/new/contract/ agreement (if defined)	Type of financial instrument: procurement/grant/prize	Indicative number of contracts / agreements / amendments / options (procurements) Type of applicants targeted by the call for proposals (grants) Type of participants targeted by the contest (prizes)	Indicative timetable for publication/launch	Indicative funds set aside for the award of contracts (M€)
WP4 Downstream	New	Procurement	1	22S1	0,0
WP4 Downstream	New	Procurement	7	22S2	3,2

XI.4 Space Situational Awareness (SSA)

Budget line 3932

Under the Contribution Agreement between European Commission and EUSPA for the Space programme and Horizon Europe, signed according to the Framework Partnership Agreement between EC, EUSPA and ESA in line with Art. 28(4) of the EU Space Regulation⁴³, EUSPA is entrusted with the implementation of tasks pursuing the following high-level objectives for the period of its duration⁴⁴.

In accordance with the FPPA and the Contribution Agreement the activities to be conducted by EUSPA for the SSA component, as included in SSA Work Plan and LTBP starting from 2022, are summarized as follows:

Activities related to user uptake of data, information and services:

- Contact with users on the quality of services: EUSPA shall monitor and report about the quality of services for users.
- Service provision monitoring through the establishment, monitoring and reporting on Key Indicators (KIs)
- Ensure the operation of the helpdesk for users: EUSPA shall set up and operate a “front desk” which provides the main support interface between SST users and NOCs (national operation centres) regarding all information exchange related to the EUSST Service Provision Portal and the SST services and information offered, in line with the implementation of the future EUSST partnership in 2023.
- Develop information and communication campaigns: EUSPA shall launch promotion and communication campaigns in order to increase the knowledge of the general public on EUSST and attract more potential users for the EUSST services
- Support tasks:

⁴³ REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU

⁴⁴ the period during which EUSPA may enter into contracts, conclude grant agreements or award prizes for the implementation of the entrusted tasks is until 31 December 2028

[General support]

- support the Commission as far as project management and technical matters are concerned, in particular in preparation of the security management and the operational users' management/coordination;

[Security support]

- support the Commission in the elaboration of the SST sub-component general security requirement;
- support in complementarity with the tasks performed by the EUSST Partnership the Commissions responsibility with regards to SAB in the accreditation;
- support the use of off-line encryption means;

[Technical support]

- provide technical input to the Commission Programme Committee configurations and sub-groups, expert groups, task forces, workshops, and stakeholder consultations;
 - participate to the SST User Forum.
 - In accordance with the legal basis of the EU space programme and the Horizon Europe programme, provide operational and technical reports and inputs in support of the Commission.
- Security related activities: in case the general security requirement and the afferent Risk & threat analysis confirm the necessity to identify a structure to monitor security and to follow the instructions developed under the scope of the 2021/698/CFSP, EUSPA will be designated as this structure. In which case:
 - EUSPA will ensure security monitoring duties (SECMON) of the SST networks and infrastructure and be the interface of EEAS with regards to the execution of instructions defined in accordance with 2021/698/CFSP;
 - EUSPA will develop and deploy the necessary SECMON systems in complementarity with the infrastructure development and deployment performed by the EUSST Partnership under its dedicated budget and contractual framework;
 - EUSPA will, in complementarity with the means deployed by the EUSST Partnership under budget, ensure the deployment and operations of electronic means to exchange operational classified information linked to the management of incidents and the execution of instructions in accordance with 2021/698/CFSP between the Partnership, the Commission the EEAS up to the level SECRET UE/EU SECRET.

In implementing the above-mentioned activities entrusted by the European Commission to EUSPA, the latter – relying on its know-how and processes on security operations (stemming notably from Galileo Security Monitoring), engineering, and underlying organisation – will:

- Foster synergies between SST components and Galileo
 - CD-698 interface for Council's instructions implementation, extension of CD-496 (ex-JA) to SSA/SST;
 - Cyber and Security monitoring synergies with already monitored Galileo systems (GSF, SOIF, GRON, GDDN, GCS, GMS);
 - Operations and Service provision 24/7, extension of PRS helpdesk perimeter, Secret-UE/Crypto operations;
 - Anonymity of classified or sensitive information (PRS-like), handling of interfaces on CLA and UNCLA environment (GRON, SIN-MN, Internet).
- Contribute to general security tasks
 - Synergies within accreditation strategies and processes, and activities in preparation of the SAB decisions;
 - Support to COM on Security and Cyber requirements and associated risk assessment.
- Coordinate with EUSST Partnership
 - Upon request, EUSPA contribution to Partnership evolution to be provided;
 - EUSPA Participation in EUSST committees as required by the Programme and the Partnership.

**Space programme
regulation budget
line: 3932**

For the period from the signature of the EC–EUSPA Contribution Agreements until 31/12/2022, EUSPA plans the following activities for SSA under the entrusted delegated budget:

Table 2 – 2022 activities for SSA under the entrusted delegated budget

Activity	Existing/new/contract/ agreement (if defined)	Type of financial instrument: procurement/grant/prize	Indicative number of contracts / agreements / amendments / options (procurements) Type of applicants targeted by the call for proposals (grants) Type of participants targeted by the contest (prizes)	Indicative timetable for publication/launch	Indicative funds set aside for the award of contracts (M€)
SSA Activities (help desk)	New	Procurement	5	22S1	0,7

Annex XII: 2022 Galileo annual acquisition and grant/prize plan

XII.1 Galileo Exploitation 2022 Grant Plan

The 2022 Grant plan with detailed description will be published on EUSPA website upon EC review and approval.

XII.1.1 OSNMA implementation for consumer solutions (GAL.0073)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

Consumer grade solutions often rely on space-based positioning and timing for a variety of applications, ranging from leisure/gaming to more demanding payment-critical mobile transactions. As such, they are increasingly exposed to spoofing threats.

Galileo will soon start offering for free, to all users on the first frequency (E1B) a clear differentiator which will enhance the performance of the Open Service, complementing it with the capability to authenticate the navigation message. Such capability, known as Open Service Navigation Message Authentication (OSNMA), will let the receiver authenticate the navigation data (I/NAV as well as E5a F/NAV, if required), increasing the robustness against certain type of data level spoofing threats.

The typical implementation of the OSNMA into a commercial receiver/terminal might be challenging for low-end consumer grade receivers that are highly power constrained, and therefore designed to minimise the battery drain. For that reason, a specific action is needed to develop a OSNMA

consumer grade receiver/terminal and associated algorithm compliant with the constraints of such class of receivers/terminals.

Priorities, objectives pursued and foreseen results:

Priorities:

The new Fundamental Elements programme focuses on the development of receivers and the operational implementation of current differentiators such as the Open Service Navigation Message Authentication (OSNMA).

Objectives pursued:

- Consolidate a specific OSNMA concept of use compatible with the target consumer grade use case.
- Design, development and testing of a consumer grade and battery sustained receiver/terminal enabled with OSNMA capability.
- Assessment and validation of the performance in an operational scenario.

Foreseen results:

- Commercial receiver/terminal optimising the OSNMA implementation for consumer grade solutions on the basis of ad-hoc trade-off analyses.
- Assessment of the performance in lab and in the field, with the aim to characterise the cost and benefits of OSNMA for the target use cases.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 1,000,000
- Indicative number of projects to be granted: up to 2 (two) projects, depending on the quality of the proposals received.

	Stages	Planning
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		(possible subject to updates)
a)	Publication of the call	Q1 2022
b)	Deadline for submitting applications	Q2 2022
c)	Evaluation period	Q3 2022
d)	Information to applicants on the outcome of the evaluation	Q4 2022
e)	Signature of the Grant Agreements	Q1 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of funds
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.1.2 HAS implementation in Agriculture & Geomatics (GAL.0074)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

The Galileo High Accuracy Service is to be an open access and free of charge service based on the provision of precise corrections (orbit, clock, biases, atmospheric) transmitted in the Galileo E6 signal (E6-B, data component) from a subset of the Galileo satellites, allowing the user to achieve improved positioning performance.

The precise corrections provided by the Galileo High Accuracy Service will allow users of the service to reduce the error associated to the orbit and clocks provided through the Galileo Open Service broadcast navigation messages and the GPS Standard Positioning Service navigation data. These corrections, together with the biases provided by the service, will enable users to perform precise positioning decimetre level accuracy. Future evolutions of the service will include regional atmospheric corrections to improve convergence times.

The implementation of the Galileo HAS is following a staggered approach based on the 3 phases:

1. Phase 0: High Accuracy testing and Experimentation
2. Phase 1: High Accuracy Initial Service
3. Phase 3: High Accuracy Full Service

As part of the HAS initial service (Phase 1), the corrections being broadcast through E6-B will also be delivered through a terrestrial interface, enabling access to the service to users not tracking E6-B and/or retrieval of corrections in environments where access to the Signal in Space (SiS) is more challenging.

Several applications in different market segments can benefit from the levels of accuracy of Galileo HAS, from mass market to more professional applications.

With this action we want to foster the development of GNSS receivers implementing HAS with real-time processing in the professional areas of agriculture and geomatics, supporting both HAS SiS and terrestrial distribution of corrections.

Priorities, objectives pursued and foreseen results:**Priorities:**

The new Fundamental Elements programme focuses on the development of receivers and the operational implementation of current differentiators such as the High Accuracy Service (HAS).

Objectives pursued:

- Support the implementation of geodetic grade receiver with full support of HAS in relevant agriculture and geomatics applications
- Validate the target performance of HAS initial and full services (Phase 1 and Phase 2)
- Obtain feedback for HAS full service consolidation

Foreseen results:

- Commercial receiver/terminal optimising the implementation of HAS in professional markets
- Assessment of the performance in lab and in the field, with the aim to characterise the cost and benefits of HAS for the target use cases.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 2,500,000
- Indicative number of projects to be granted: 2 (two) projects, depending on the quality of the proposals received.

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q1 2022
b)	Deadline for submitting applications	Q2 2022
c)	Evaluation period	Q3 2022
d)	Information to applicants on the outcome of the evaluation	Q4 2022
e)	Signature of the Grant Agreements	Q1 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of funds
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.1.3 New SAR beacons for maritime (GAL.0075)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

Global Search and Rescue (SAR) operations quickly locate and help people in distress. The SAR/Galileo service, launched on 15 December 2016 as part of Galileo Initial Services, contributes to these live-saving efforts by swiftly relaying radio beacon distress signals to the relevant SAR crews by means of dedicated payloads on-board Galileo satellites, supported by three ground stations strategically deployed across Europe.

On January 21 2020, the SAR/Galileo Return Link Service (RLS) was declared operational. Now, Galileo not only locates people in distress and makes their position known to the relevant authorities, the SAR/Galileo RLS provides an automatic acknowledgement message back to the user informing them that their request for help has been received.

The RLS is a key Galileo differentiator.

Emergency Locator Transmitters (ELTs), Emergency Position-Indicating Radio Beacons (EPIRBs) and Personal Location Beacons (PLBs) with the Galileo Return Link capability are already developed and under type approval certification process with Cospas Sarsat. First RLS-enabled PLB is already in the market.

Unfortunately there are situations where the search and rescue beacons are not manually or automatically activated and because of that rescue teams are not able to find the people in distress on time. An alternative solution to activate the beacons is to introduce through the Galileo return link a command that will activate a beacon. This service is called Galileo Remote SAR Beacon Activation (RBA).

Several challenges are still open: 1) Need to have a standardised protocol and testing procedures; 2) Need to have an independent source of power to feed the Galileo receiver that will be always on; 3) Need to have the equipment installed in an appropriate place to receive and transmit; and 4) Need to have the antennas deployed.

Those beacons that are capable to be remotely activated, will receive all return link messages provided by the Galileo satellite in view. This fact can be used as well to identify some activated beacons that might be considerably close (e.g. 100nm). Alerting the user that there is a beacon activated and that there are people in distressed in the location provided by the return link message will help to save more lives.

Based on this, a specific action is needed to develop a new generation of SAR beacons for the maritime sector (e.g. SSAS (Ship Security Alert System), EPIRBs, but also PLBs) capable to be remotely activated and/or capable to detect other activated beacons, and thus further improve the SAR operations.

Priorities, objectives pursued and foreseen results:

Priorities:

The new Fundamental Elements programme focuses on the development of new SAR Beacons in particular market segments as maritime.

Objectives pursued:

- Design, development and testing the new Galileo SAR beacons (e.g. SSAS, EPIRBs and PLBs) with the remote activation capability implemented and/or with the activated beacon detection capability implemented.
- Support the definition of appropriate protocols and tests for RBA within the different standardisation and certification bodies depending on the use case, including conformity procedures (e.g. standardisation and certification)

Foreseen results:

- Commercial beacons optimising the RBA implementation for maritime users for SSAS, EPIRBs and PLBs.
- Assessment of the performance in laboratory and in the field, with the aim to characterise the cost and benefits of RBA for the target use cases.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 4,000,000
- Indicative number of projects to be granted: 3 (three) projects, depending on the quality of the proposals received.

	Stages	Planning (possible subject to updates)
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a)	Publication of the call	Q3 2022
b)	Deadline for submitting applications	Q4 2022
c)	Evaluation period	Q1 2023
d)	Information to applicants on the outcome of the evaluation	Q2 2023
e)	Signature of the Grant Agreements	Q3 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of fund
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.1.4 Early Warning Service Galileo devices (GAL.0076)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

<p>Galileo will provide a sophisticated Emergency Warning Service (EWS). This service is meant to alert and guide endangered citizens directly through any Galileo-enabled device (e.g. smartphones, smartwatches, specialized equipment for outdoors activities and other sport wearables, dedicated receivers for public buildings, dedicated navigators for tractors, cars, leisure vessels and general aviation) and stands out through the fact that it is available when nothing of the ground infrastructure remains. It will provide on-demand broadcast of the alert messages and associated guidance to the affected population in minutes. The service - introduced by the EU Space Programme Regulation – will be free of charge with global coverage and provided in cooperation with Member States national civil protection authorities. Its implementation via Galileo satellites makes it resilient to ground destruction, independent of terrestrial mobile networks and complements existing warning systems. To prepare to the Initial Service Declaration there is the need to develop new Galileo enabled devices for the reception of Emergency Warnings based on Galileo EWS.</p>

Priorities, objectives pursued and foreseen results:

Priorities:

The new Fundamental Elements programme focuses on the development of receivers/devices and the implementation of new differentiators such as the Galileo EWS.

Objectives pursued:

- Design, Develop and test a Galileo enabled devices (e.g. smartphones, smartwatches, specialized equipment for outdoors activities and other sport wearables, dedicated receivers for buildings and dedicated receivers for cars and vessels) for the reception of Emergency Warnings based on Galileo EWS.
- Support the definition of appropriate protocols and tests for EWS within the different standardisation and certification bodies depending on the use case, including conformity procedures (e.g. standardisation and certification)

Foreseen results:

- Prototype receiver/device optimising the implementation of Galileo EWS in target use cases
- Assessment of the performance in laboratory and in the field, with the aim to characterise the cost and benefits of EWS for the target use cases.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 1,000,000
- Indicative number of projects to be granted: 2 (two) projects, depending on the quality of the proposals received).

	Stages	Planning (possible subject to updates)
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a)	Publication of the call	Q3 2022
b)	Deadline for submitting applications	Q4 2022
c)	Evaluation period	Q1 2023
d)	Information to applicants on the outcome of the evaluation	Q2 2023
e)	Signature of the Grant Agreements	Q3 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of funds
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.1.5 Connectivity (GAL.0077)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

The number of connected devices is growing exponentially and the importance of locating “things” is increasing. It is no longer relevant for the asset to locate itself but for the solution owner to locate all assets at the same time with minimal total power drain.

This action will address the optimisation of Galileo use in connected devices, focussing on innovative concepts using cloud processing, hybridisation of GNSS with 5G and other dedicated networks as well as implementation of new Galileo features proposed for low power tracking.

Priorities, objectives pursued and foreseen results:

Priorities:

- The new Fundamental Elements programme focuses on the development of receivers, devices, antennas and related emerging, disruptive technologies exploring the hybridisation of GNSS with 5G and other dedicated networks

Objectives pursued:

- Development of chipsets and receivers as well as hybrid solutions to address specific challenges of low power tracking in connected devices

Foreseen results:

- Commercial receiver/terminal or hybrid solution optimising the Galileo use in low power tracking use cases.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 3,000,000
- Indicative number of projects to be granted: 4 (four) projects, depending on the quality of the proposals received.

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q4 2022

b)	Deadline for submitting applications	Q1 2023
c)	Evaluation period	Q2 2023
d)	Information to applicants on the outcome of the evaluation	Q3 2023
e)	Signature of the Grant Agreements	Q4 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of funds
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.1.6 Artificial Intelligence, Machine Learning (GAL.0078)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3929

Background

Digitalisation permits to accelerate processes, improve productivity, enable new methods of working and unlock new business models. The adoption of Artificial Intelligence (AI) and Machine Learning (ML) represent a significant opportunity for creating novel technological solutions. The development of AI-powered products are becoming vital to many industries, however, data analysis with AI requires huge processing power and connectivity. Standalone edge AI chipsets are proposed as a solution to improve the capabilities of existing devices, operating in tandem with cloud-based AI solutions.

In the framework of GNSS services, AI chips can have various applications, including the: i) mitigation of GNSS jamming and spoofing, ii) improvement of the detection of potential GNSS service degradation, iii) enhancement of the complementarity of PNT solutions with AI-supported sensor-fusion, iv) enable scalable edge servers to collect and process data from network devices, e.g. IoT, drones etc. AI chips can be customised for various applications in all market segments, stimulating market uptake

This action will address the design and development of AI-chips for improved and cost-efficient EGNSS devices, increasing security, reliability and accessibility, introducing mass-customisation and cooperative design, as well as simplifying multi-sensor operations. Proposals may also include the development and evolution of cloud-native AI/ML orchestration solutions to enable sensor/data

fusion for automated decision intelligence applications, optimizing cloud/network resource management, enhancing security and creating new business opportunities.

Priorities, objectives pursued and foreseen results:

Priorities:

- The new Fundamental Elements programme focuses on the development of receivers, antennas and related emerging, disruptive technologies leveraging the Machine Learning and Artificial Intelligence techniques.

Objectives pursued:

- Design and development of elements which can support the deployment of AI for improving EGNSS services such as graphics processing units (GPUs), field-programmable gate arrays (FPGAs) and application-specific integrated circuits (ASICs) and/or techniques for the multipath mitigation.
- Development of enhanced PNT and cost-effective standalone solutions taking advantage of EGNSS data combined with AI/ML techniques.
- Development and evolution of edge- and cloud-native AI/ML orchestration solutions to leverage AI chipsets and enable sensor/data fusion for automated decision intelligence applications.

Foreseen results:

- Technology development of prototype AI chipsets in tandem with cloud-native AI/ML orchestration solutions, aimed to empower the next generation of receivers and antennas and improve EGNSS services also in synergy with Copernicus.
- Assessment of the performance in lab environment, with the aim to demonstrate feasibility and characterise the cost and benefits of AI chipsets and edge-cloud tandem operation, including their proposed implementation to support automated decision intelligence applications.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q4 2022
b)	Deadline for submitting applications	Q1 2023
c)	Evaluation period	Q2 2023
d)	Information to applicants on the outcome of the evaluation	Q3 2023
e)	Signature of the Grant Agreements	Q4 2023

Award schedule:

- Allocated budget for the Call for Proposal: € 3,000,000
- Indicative number of projects to be granted: 3 (three) projects, depending on the quality of the proposals received.

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

<p>The anticipated “reserve” activities identified are:</p> <p>(1) Additional eligible grants in the reserve list of this call in case of availability of funds</p> <p>(2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.</p>

Level of security classification (if needed):

N/A

XII.1.7 Operational implementation of EGNSS solutions and Copernicus integrated applications (GEX.0066)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3922

Background

The operational use of E-GNSS is ramping up in different market segments. While adoption in mass market and professional segments is fast and driven by innovation at receiver level, the adoption in regulated market segments where lead times are longer, requires additional support. As an example, large scale implementation and use of E-GNSS in transport applications, such as rail, maritime and certain aviation applications is not fully deployed yet. The integration of E-GNSS with Copernicus data into final commercial solutions is progressing and there is need for support to exploit the full potential of deployment in end to end use cases. At the same time, the introduction of innovative solutions ready for the market need further support, in order to encourage pioneer users to assess its benefits in real operational environments.

These grants provide the last mile to enable E-GNSS differentiators and Copernicus data integrated solutions operationally used by co-funding pioneer users to deploy commercial Galileo equipment and integrated solutions with Copernicus data in complex use cases, such as, but not limited to transport infrastructure. The grants support the integration of Galileo commercial receivers in final user terminals and with dedicated Copernicus data sets, installation and development into final end to end solutions, as well as development of pilot projects to trigger larger scale operational implementation of Galileo, as well as integrated applications with Copernicus data.

The activity builds on the successful implementation of the EGNOS Adoption grants from aviation and other transport modes in the previous MFF, and extends the approach also to Galileo and integrated applications with Copernicus data in areas where receivers, applications and data are ready in the market, but the operational installation and operational use is not fully in place yet.

Priorities, objectives pursued and foreseen results:**Priorities:**

Operational implementation of Galileo and integrated applications with Copernicus data in complex and large infrastructure, such as, but not limited to, transport, by co-funding development, installation and launch of operational use as a strategic goal to ensure the success of the programme. In this context, the objective of this activity is, on one hand, to foster Galileo and Copernicus adoption at European level, with focus on its differentiators in view of large scale implementation, enabling users to get equipped and obtain operational experience on the use of Galileo and Copernicus with enabled terminals and suited data, and on the other hand, implement and validate new operations based on Galileo and Copernicus data in real user environment.

Objectives pursued:

- Design, development and installation of EGNSS enabled user terminals in final use cases in long lead term markets, such as transport, including:
 - Design, development and installation and operational use of Galileo enabled user terminals in aviation, including navigation (integration of EGNSS DFMC (Dual Frequency Multi Constellation) receiver in commercial avionics), as well as other areas, such as aviation, but not limited to search and rescue, airport operations and infrastructure synchronisation.
 - Design, development and installation of Galileo enabled user terminals in maritime, such as, inn vessels for both navigation and position reporting, deployment of Galileo capable Portable Pilot units in real operations and upgrade of port and coastal infrastructure with Galileo based terminals, including buoys, for navigation and timing purposes (e.g. R-Mode).
 - Development and installation of Galileo terminals in rail non-safety critical applications. Development and installation of Galileo terminals in public transport networks
 - Development and integration of Galileo receivers in UAV commercial operations.
 - Operational integration of innovative EGNSS solutions in real use cases in all market segments, fostering operational use.

- Integration of Galileo enabled user terminals with Copernicus datasets into operational end to end solutions, including
 - Pilot projects to validate new use cases of integrated Space services and data
 - Deployment of integrated applications into large scale use cases

Foreseen results:

Large scale operational implementation of Galileo enabled user terminals and integration with Copernicus data in all market segments, fostering commercialisation of innovative applications in end to end use cases, such as, but not limited to, long lead term markets as transport.

Form of funding:

Up to 70% funding of the eligible total costs.

Intended duration of the activity:

2 years

Award schedule:

- Allocated budget for the Call for Proposal: € 7,000,000
- Indicative number of projects to be granted: 7 (seven) projects, depending on the quality of the proposals received.

	Stages	Planning (possible subject to updates)
a)	Publication of the call	Q4 2022
b)	Deadline for submitting applications	Q1 2023

c)	Evaluation period	Q2 2023
d)	Information to applicants on the outcome of the evaluation	Q3 2023
e)	Signature of the Grant Agreements	Q4 2023

List of “Reserve” activities to be awarded in case of shortcomings in the planned actions or of availability of fund:

The anticipated “reserve” activities identified are:

- (1) Additional eligible grants in the reserve list of this call in case of availability of funds
- (2) Additional grants non part of this Grant plan merging different FE leftovers and subject to the submission of dedicated grant plan to EC for approval.

Level of security classification (if needed):

N/A

XII.2 Galileo Exploitation 2022 Prize Plan

XII.2.1 myEUspace 2022 (GEX.0021)

Legal basis

REGULATION (EU) 2021/696 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU.

Budget line

3922

Background

<p>The EUSPA will organise myEUspace 2022 similar to myEUspace 2021 competition, also building on MyGalileo series experience and expanding the concept to consider other EU space programmes. This competition aims at encouraging EU entrepreneurship and business creation by promoting the development of innovative solutions, either products or services, based on Galileo, Copernicus and their synergies. Innovators and start-ups will be supported by this competition to realise their idea, setting up or growing their business venture. The competition's innovation areas will be defined at a later stage.</p>

Objectives pursued and type of participants targeted by the contest:

Objectives pursued: The objective of the contest is to support the development of innovative commercial solutions (mobile apps or hardware-based solutions) leveraging EU Space programmes Galileo and/ or Copernicus and foster entrepreneurship in the space downstream sector. Innovators and start-ups will be supported by this competition to realise their idea, setting up or growing their business venture.

Type of participants targeted by the contest: Participation in the contest will be open to teams, ideally from two (2) to seven (7) participants, composed by natural persons or legal entities. The participant teams should ideally be start-ups, Small and Medium Enterprises (SMEs), spinout companies, university students and young entrepreneurs.

Global budgetary envelope:

1 000 000 EUR

Budget per prize:

10-50 000 EUR

Award schedule (i.e. publication of the contest and target award date):

	Stages	Planning (possible subject to updates)
a)	Publication of the prize	September 2022
b)	Deadline for submitting applications	November 2022
c)	Evaluation period	December 2022
d)	Information to applicants on the outcome of the evaluation	January 2023
e)	Award of the prize	March-April 2023

